

No Calculators



Volume 2

WRITTEN BY RON SHAW



THE ACTIVITIES IN THIS BOOK ADDRESS MANY OUTCOMES IN THE SYLLABUS

No Calculators Vol 2 (for ages 11+)

Intelligent Australia Productions

First published in 2008 by Intelligent Australia Productions

© Ron Shaw 2008

ISBN 978-0-9804341-6-3

IAP 027

Intelligent Australia Productions
PO Box 670
Hillarys, WA 6923
Australia

Tel: (08) 9307 8365
Fax: (08) 9402 2339
Email: intelligent.australia@yahoo.com

COPYING OF THIS BOOK BY EDUCATIONAL INSTITUTIONS

A purchasing educational institution may only photocopy pages within this book in accordance with the Australian Copyright Act 1968 (the Act) and provided the educational institution (or body that administers it) has given a remuneration notice to the Copyright Agency Limited (CAL) under the Act.

Note to Teachers

This book contains some examples that are the same as those in 'No Calculators Vol 1', written for ages 8-10. There are more examples in this book and there are some questions with a higher level of difficulty.

Dedicated to Casey

www.intelligentaustralia.com



- Postal Address

IAP
PO Box 670
Hillarys, WA
Australia 6923

- Email

intelligent.australia@yahoo.com

- Telephone

(08) 9307 8365 Int'l (618) 9307 8365

- Fax

(08) 9402 2339 Int'l (618) 9402 2339

Intelligent Australia Productions is committed to raising standards
in Literacy and Numeracy in Australian schools.

www.intelligentaustralia.com

Contents

| | |
|---|------|
| Selected questions require writing units of Money, Time, Metric Measurements (Length, Mass, Capacity etc) | Page |
| Teachers Notes | 4-5 |
| Addition Basic facts to 18 | 6 |
| Addition Three and more 1-digit Addends | 7 |
| Addition Two 2-digit Addends (no carrying) | 8 |
| Addition Two 2-digit Addends (carrying required) | 9 |
| Addition Three and more 2-digit Addends (no carrying) | 10 |
| Addition Three and more 2-digit Addends (carrying required) | 11 |
| Addition Two 3-digit Addends (no carrying) | 12 |
| Addition Two 3-digit Addends (carrying required) | 13 |
| Subtraction Basic facts: 1 and 2-digit minuend 1-digit subtrahend | 14 |
| Subtraction 2-digit minuend 1 and 2-digit subtrahend (no borrowing) | 15 |
| Subtraction 2-digit minuend 1 and 2-digit subtrahend (borrowing required) | 16 |
| Subtraction 3-digit minuend 2 and 3-digit subtrahend (no borrowing) | 17 |
| Subtraction 3-digit minuend 2 and 3-digit subtrahend (borrowing required) | 18 |
| Subtraction 4, 5, 6 and 7-digit minuends 4, 5, 6 and 7-digit subtrahends (no borrowing) | 19 |
| Subtraction 4, 5, 6 and 7-digit minuends 4, 5, 6 and 7-digit subtrahends (borrowing required) | 20 |
| Addition and Subtraction Review | 21 |
| Multiplication Basic facts: Times Tables to 10×10 | 22 |
| Multiplication 1-digit multiplier 2, 3 and 4-digit multiplicands (no carrying) | 23 |
| Multiplication 1-digit multiplier 2, 3 and 4-digit multiplicands (carrying required) | 24 |
| Multiplication 2-digit multiplier 2 and 3-digit multiplicands (no carrying) | 25 |
| Multiplication 2-digit multiplier 2 and 3-digit multiplicands (carrying required) | 26 |
| Multiplication 3-digit multiplier 3-digit multiplicand (no carrying) | 27 |
| Multiplication 3-digit multiplier 3-digit multiplicand (carrying required) | 28 |
| Division Basic facts: Times Tables to $100 \div 10$ | 29 |
| Division 1 and 2-digit dividend 1-digit divisor (remainders) | 30 |
| Division 3-digit dividend 1-digit divisor (no remainders) | 31 |
| Division 3-digit dividend 1-digit divisor (remainders) | 32 |
| Division 4, 5, 6 and 7-digit dividends 1-digit divisors (no remainders) | 33 |
| Division 4, 5, 6 and 7-digit dividends 1-digit divisors (remainders) | 34 |
| Multiplication and Division Review | 35 |
| Solutions | 36 |

Teachers Notes

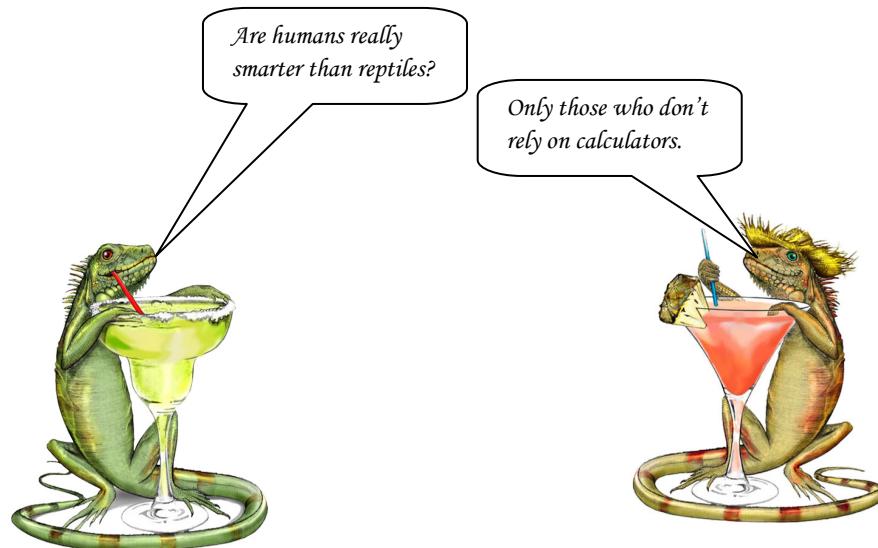
There's an Australian saying, "I'm flat out like a lizard drinking".

As it happened, two of our reptilian cousins were philosophising one day –over a drink of course- wondering whether the human brain had indeed (as they'd heard) evolved beyond the more primitive level of their own.

One commented that humans were brainy enough to invent calculators, machines that could not only perform the work of human brains but do it more quickly and with unfailing accuracy.

To which the other retorted, "How brainy is it to invent something that stops you using your brain?"

This was an interesting observation, one that called upon yet more philosophising - over a drink of course.



Someone once asked me if I thought calculators were a good invention.

"Not good," I replied, ".....marvellous."

My enquirer, one who knows that I cringe whenever any of my year 12 students reaches for their calculator for even the simplest computation, was befuddled.

I explained that calculators were created to complement -not replace- the brain. To accomplish what they're designed for, they're brilliant. But if they're over-used, employed when they're not really needed or used as a crutch, they make us lazy.

Human brains (especially developing ones) benefit from exercise; when we make calculations the neurones in the maths parts of our brain are given a 'work out' (not unlike our hearts and lungs when we undertake aerobic activities, or our muscles when we do strength and conditioning exercises).

So, when *should* we use calculators?

Use them as a last resort, for complex or difficult problems.

But for the basics of addition, subtraction, multiplication and division, use your brain.

continued

Teachers Notes *continued*

This book has been designed to provide consolidation in the 4 mathematical operations (addition, subtraction, multiplication and division).

As the title suggests, calculators should not be used.

Maths is about two things, accuracy and speed.

Usually (but not always) 'a miss is as good as a mile' applies to maths (the exceptions being *estimating* and *approximations*).

In maths –unlike in subjects that ask for views and opinions- accuracy is vital.

But how important, in maths, is speed?

The answer of course is....*extremely important* (though accuracy comes first by a long way).

Let's face it, there are many real-life situations where on-the-spot maths calculations are required. And sometimes there's only a limited amount of time in which to come up with the correct answer.

Examples:

- *checking your change before the next person in the queue is served*
- *working out how long you have in which to get ready in time for the next bus (and you're in a hurry)*
- *being asked how many points you scored altogether in your last two basketball matches*
and so on.

Two people, A and B, sit a maths test.

A completes the test in 20 minutes while B takes 60 minutes to finish the test.

Both A and B score 100%. Who, A or B, is better at maths?

With the above in mind it is suggested that a time limit be set for each of the worksheets that follow. What is the best time limit?

My own tests have shown that if the class knows that 'time's up' occurs when, say, just three students have completed all examples, everyone will work as fast as they can. Sure, most won't complete the sheet and there will be those who don't get too many done at all. But should this be of concern? No. The issue at hand is speed....training the brain to make calculations as fast as possible....getting all those maths neurones, with their complex networks and connections, firing as rapidly as possible, helping to strengthen and condition the areas of the brain involved in maths computations.

Sound familiar? Yes, there are indeed strong parallels to a PE lesson.

Brain cells, like muscle cells, need nourishing and will stagnate if not used.

An exercised brain is a healthy brain.

So, good luck.....and remember.....*no calculators*.

Ron Shaw

*Ron Shaw has written more than 50 books for teachers and their students.
He is a member of the Australian Association of Mathematics Teachers.*

Note

Some of the examples in this book are the same as those in No Calculators Vol 1 (*for ages 8-10*). This volume has more examples and, in some cases, new concepts are covered.





Addition

Basic facts to 18



| | | | | |
|------------|------------|------------|------------|------------|
| 1 | 2 | 3 | 4 | 5 |
| + <u>4</u> | + <u>5</u> | + <u>4</u> | + <u>8</u> | + <u>5</u> |
| 6 | 7 | 8 | 9 | 10 |
| + <u>8</u> | + <u>4</u> | + <u>4</u> | + <u>9</u> | + <u>2</u> |
| 11 | 12 | 13 | 14 | 15 |
| + <u>9</u> | + <u>8</u> | + <u>7</u> | + <u>6</u> | + <u>7</u> |
| 16 | 17 | 18 | 19 | 20 |
| + <u>3</u> | + <u>8</u> | + <u>3</u> | + <u>5</u> | + <u>5</u> |
| 21 | 22 | 23 | 24 | 25 |
| + <u>8</u> | + <u>9</u> | + <u>9</u> | + <u>2</u> | + <u>5</u> |
| 26 | 27 | 28 | 29 | 30 |
| + <u>7</u> | + <u>3</u> | + <u>5</u> | + <u>9</u> | + <u>9</u> |
| 31 | 32 | 33 | 34 | 35 |
| + <u>8</u> | + <u>3</u> | + <u>3</u> | + <u>3</u> | + <u>7</u> |
| 36 | 37 | 38 | 39 | 40 |
| + <u>7</u> | + <u>6</u> | + <u>6</u> | + <u>5</u> | + <u>6</u> |
| 41 | 42 | 43 | 44 | 45 |
| + <u>9</u> | + <u>7</u> | + <u>7</u> | + <u>8</u> | + <u>5</u> |
| 46 | 47 | 48 | 49 | 50 |
| + <u>4</u> | + <u>8</u> | + <u>6</u> | + <u>6</u> | + <u>7</u> |



Addition

Three and more 1-digit Addends



| | | | | | | | | | |
|----|-------------------------|----|-------------------------|----|-------------------------|----|-------------------------|----|-------------------------|
| 1 | 5 4 + 8 | 2 | 7 3 + 5 | 3 | 2 4 + 6 | 4 | 8 3 + 4 | 5 | 3 9 + 2 |
| 6 | 8 3 + 8 | 7 | 7 9 + 4 | 8 | 5 5 + 3 | 9 | 9 1 + 7 | 10 | 1 3 + 9 |
| 11 | 8 8 + 8 | 12 | 4 5 + 6 | 13 | 1 9 + 1 | 14 | 6 2 + 7 | 15 | 5 9 + 8 |
| 16 | 6 4 2 + 3 | 17 | 8 2 1 + 9 | 18 | 4 7 7 + 1 | 19 | 3 3 9 + 5 | 20 | 8 3 8 + 1 |
| 21 | 4 2 8 + 6 | 22 | 5 3 5 + 5 | 23 | 1 1 7 + 6 | 24 | 4 8 3 + 9 | 25 | 1 9 9 + 6 |
| 26 | 4 4 7 + 7 | 27 | 3 8 1 + 7 | 28 | 8 2 9 + 4 | 29 | 9 9 5 + 2 | 30 | 8 3 9 + 1 |
| 31 | 7 6 7 4 + 2 | 32 | 5 1 3 9 + 4 | 33 | 8 4 5 1 + 4 | 34 | 3 8 1 4 + 5 | 35 | 2 8 1 1 + 6 |
| 36 | 9 2 3 2 + 7 | 37 | 3 4 1 8 + 5 | 38 | 3 2 8 2 + 1 | 39 | 4 7 5 2 + 9 | 40 | 5 3 7 9 + 1 |



Addition

Two 2-digit Addends (no carrying)



$$\begin{array}{r} 1 \quad 35 \\ + \underline{42} \end{array}$$

$$\begin{array}{r} 2 \quad 27 \\ + \underline{51} \end{array}$$

$$\begin{array}{r} 3 \quad 36 \\ + \underline{23} \end{array}$$

$$\begin{array}{r} 4 \quad 64 \\ + \underline{35} \end{array}$$

$$\begin{array}{r} 5 \quad 52 \\ + \underline{34} \end{array}$$

$$\begin{array}{r} 6 \quad 17 \\ + \underline{60} \end{array}$$

$$\begin{array}{r} 7 \quad 42 \\ + \underline{46} \end{array}$$

$$\begin{array}{r} 8 \quad 65 \\ + \underline{23} \end{array}$$

$$\begin{array}{r} 9 \quad 64 \\ + \underline{20} \end{array}$$

$$\begin{array}{r} 10 \quad 43 \\ + \underline{43} \end{array}$$

$$\begin{array}{r} 11 \quad 36 \\ + \underline{61} \end{array}$$

$$\begin{array}{r} 12 \quad 34 \\ + \underline{34} \end{array}$$

$$\begin{array}{r} 13 \quad 53 \\ + \underline{32} \end{array}$$

$$\begin{array}{r} 14 \quad 71 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 15 \quad 65 \\ + \underline{33} \end{array}$$

$$\begin{array}{r} 16 \quad 44 \\ + \underline{33} \end{array}$$

$$\begin{array}{r} 17 \quad 56 \\ + \underline{23} \end{array}$$

$$\begin{array}{r} 18 \quad 18 \\ + \underline{81} \end{array}$$

$$\begin{array}{r} 19 \quad 23 \\ + \underline{55} \end{array}$$

$$\begin{array}{r} 20 \quad 37 \\ + \underline{42} \end{array}$$

$$\begin{array}{r} 21 \quad 47 \\ + \underline{12} \end{array}$$

$$\begin{array}{r} 22 \quad 37 \\ + \underline{22} \end{array}$$

$$\begin{array}{r} 23 \quad 52 \\ + \underline{22} \end{array}$$

$$\begin{array}{r} 24 \quad 60 \\ + \underline{24} \end{array}$$

$$\begin{array}{r} 25 \quad 42 \\ + \underline{36} \end{array}$$

$$\begin{array}{r} 26 \quad 34 \\ + \underline{43} \end{array}$$

$$\begin{array}{r} 27 \quad 16 \\ + \underline{23} \end{array}$$

$$\begin{array}{r} 28 \quad 73 \\ + \underline{22} \end{array}$$

$$\begin{array}{r} 29 \quad 61 \\ + \underline{15} \end{array}$$

$$\begin{array}{r} 30 \quad 67 \\ + \underline{22} \end{array}$$

$$\begin{array}{r} 31 \quad 43 \\ + \underline{45} \end{array}$$

$$\begin{array}{r} 32 \quad 55 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 33 \quad 84 \\ + \underline{14} \end{array}$$

$$\begin{array}{r} 34 \quad 46 \\ + \underline{12} \end{array}$$

$$\begin{array}{r} 35 \quad 43 \\ + \underline{34} \end{array}$$

$$\begin{array}{r} 36 \quad 28 \\ + \underline{31} \end{array}$$

$$\begin{array}{r} 37 \quad 53 \\ + \underline{26} \end{array}$$

$$\begin{array}{r} 38 \quad 26 \\ + \underline{31} \end{array}$$

$$\begin{array}{r} 39 \quad 42 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 40 \quad 19 \\ + \underline{60} \end{array}$$

$$\begin{array}{r} 41 \quad 70 \\ + \underline{26} \end{array}$$

$$\begin{array}{r} 42 \quad 25 \\ + \underline{24} \end{array}$$

$$\begin{array}{r} 43 \quad 33 \\ + \underline{24} \end{array}$$

$$\begin{array}{r} 44 \quad 84 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 45 \quad 25 \\ + \underline{44} \end{array}$$



Addition

Two 2-digit Addends (carrying required)



$$\begin{array}{r} 1 \quad 47 \\ + \underline{38} \end{array}$$

$$\begin{array}{r} 2 \quad 49 \\ + \underline{26} \end{array}$$

$$\begin{array}{r} 3 \quad 26 \\ + \underline{36} \end{array}$$

$$\begin{array}{r} 4 \quad 19 \\ + \underline{57} \end{array}$$

$$\begin{array}{r} 5 \quad 76 \\ + \underline{14} \end{array}$$

$$\begin{array}{r} 6 \quad 54 \\ + \underline{28} \end{array}$$

$$\begin{array}{r} 7 \quad 61 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 8 \quad 37 \\ + \underline{27} \end{array}$$

$$\begin{array}{r} 9 \quad 49 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 10 \quad 32 \\ + \underline{49} \end{array}$$

$$\begin{array}{r} 11 \quad 29 \\ + \underline{45} \end{array}$$

$$\begin{array}{r} 12 \quad 63 \\ + \underline{18} \end{array}$$

$$\begin{array}{r} 13 \quad 46 \\ + \underline{46} \end{array}$$

$$\begin{array}{r} 14 \quad 51 \\ + \underline{29} \end{array}$$

$$\begin{array}{r} 15 \quad 28 \\ + \underline{44} \end{array}$$

$$\begin{array}{r} 16 \quad 43 \\ + \underline{17} \end{array}$$

$$\begin{array}{r} 17 \quad 74 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 18 \quad 28 \\ + \underline{18} \end{array}$$

$$\begin{array}{r} 19 \quad 35 \\ + \underline{15} \end{array}$$

$$\begin{array}{r} 20 \quad 63 \\ + \underline{27} \end{array}$$

$$\begin{array}{r} 21 \quad 55 \\ + \underline{28} \end{array}$$

$$\begin{array}{r} 22 \quad 57 \\ + \underline{39} \end{array}$$

$$\begin{array}{r} 23 \quad 36 \\ + \underline{17} \end{array}$$

$$\begin{array}{r} 24 \quad 63 \\ + \underline{28} \end{array}$$

$$\begin{array}{r} 25 \quad 53 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 26 \quad 30 \\ + \underline{89} \end{array}$$

$$\begin{array}{r} 27 \quad 67 \\ + \underline{42} \end{array}$$

$$\begin{array}{r} 28 \quad 76 \\ + \underline{33} \end{array}$$

$$\begin{array}{r} 29 \quad 54 \\ + \underline{55} \end{array}$$

$$\begin{array}{r} 30 \quad 38 \\ + \underline{81} \end{array}$$

$$\begin{array}{r} 31 \quad 67 \\ + \underline{52} \end{array}$$

$$\begin{array}{r} 32 \quad 45 \\ + \underline{64} \end{array}$$

$$\begin{array}{r} 33 \quad 65 \\ + \underline{53} \end{array}$$

$$\begin{array}{r} 34 \quad 37 \\ + \underline{71} \end{array}$$

$$\begin{array}{r} 35 \quad 29 \\ + \underline{80} \end{array}$$

$$\begin{array}{r} 36 \quad 56 \\ + \underline{67} \end{array}$$

$$\begin{array}{r} 37 \quad 78 \\ + \underline{45} \end{array}$$

$$\begin{array}{r} 38 \quad 76 \\ + \underline{85} \end{array}$$

$$\begin{array}{r} 39 \quad 87 \\ + \underline{74} \end{array}$$

$$\begin{array}{r} 40 \quad 93 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 41 \quad 65 \\ + \underline{56} \end{array}$$

$$\begin{array}{r} 42 \quad 76 \\ + \underline{77} \end{array}$$

$$\begin{array}{r} 43 \quad 67 \\ + \underline{48} \end{array}$$

$$\begin{array}{r} 44 \quad 74 \\ + \underline{56} \end{array}$$

$$\begin{array}{r} 45 \quad 79 \\ + \underline{39} \end{array}$$



Addition

Three and more 2-digit Addends (no carrying)



$$\begin{array}{r} 1 \quad 43 \\ & 21 \\ + & \underline{20} \end{array}$$

$$\begin{array}{r} 2 \quad 34 \\ & 13 \\ + & \underline{21} \end{array}$$

$$\begin{array}{r} 3 \quad 13 \\ & 12 \\ + & \underline{42} \end{array}$$

$$\begin{array}{r} 4 \quad 23 \\ & 23 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 5 \quad 40 \\ & 23 \\ + & \underline{10} \end{array}$$

$$\begin{array}{r} 6 \quad 33 \\ & 23 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 7 \quad 30 \\ & 20 \\ + & \underline{19} \end{array}$$

$$\begin{array}{r} 8 \quad 32 \\ & 25 \\ + & \underline{21} \end{array}$$

$$\begin{array}{r} 9 \quad 51 \\ & 16 \\ + & \underline{22} \end{array}$$

$$\begin{array}{r} 10 \quad 34 \\ & 22 \\ + & \underline{21} \end{array}$$

$$\begin{array}{r} 11 \quad 12 \\ & 23 \\ & 15 \\ + & \underline{32} \end{array}$$

$$\begin{array}{r} 12 \quad 23 \\ & 15 \\ & 30 \\ + & \underline{21} \end{array}$$

$$\begin{array}{r} 13 \quad 24 \\ & 13 \\ & 30 \\ + & \underline{32} \end{array}$$

$$\begin{array}{r} 14 \quad 17 \\ & 20 \\ & 30 \\ + & \underline{11} \end{array}$$

$$\begin{array}{r} 15 \quad 15 \\ & 31 \\ & 31 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 16 \quad 22 \\ & 11 \\ & 33 \\ + & \underline{11} \end{array}$$

$$\begin{array}{r} 17 \quad 23 \\ & 23 \\ & 23 \\ + & \underline{20} \end{array}$$

$$\begin{array}{r} 18 \quad 22 \\ & 32 \\ & 30 \\ + & \underline{14} \end{array}$$

$$\begin{array}{r} 19 \quad 14 \\ & 13 \\ & 50 \\ + & \underline{21} \end{array}$$

$$\begin{array}{r} 20 \quad 24 \\ & 10 \\ & 13 \\ + & \underline{11} \end{array}$$

$$\begin{array}{r} 21 \quad 14 \\ & 12 \\ & 12 \\ & 40 \\ + & \underline{11} \end{array}$$

$$\begin{array}{r} 22 \quad 22 \\ & 22 \\ & 11 \\ & 11 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 23 \quad 23 \\ & 10 \\ & 20 \\ & 13 \\ + & \underline{22} \end{array}$$

$$\begin{array}{r} 24 \quad 12 \\ & 23 \\ & 10 \\ & 24 \\ + & \underline{20} \end{array}$$

$$\begin{array}{r} 25 \quad 12 \\ & 13 \\ & 50 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 26 \quad 10 \\ & 11 \\ & 12 \\ & 12 \\ + & \underline{41} \end{array}$$

$$\begin{array}{r} 27 \quad 21 \\ & 30 \\ & 20 \\ & 15 \\ + & \underline{12} \end{array}$$

$$\begin{array}{r} 28 \quad 12 \\ & 20 \\ & 20 \\ & 10 \\ + & \underline{13} \end{array}$$

$$\begin{array}{r} 29 \quad 21 \\ & 12 \\ & 12 \\ & 30 \\ + & \underline{11} \end{array}$$

$$\begin{array}{r} 30 \quad 15 \\ & 30 \\ & 30 \\ & 10 \\ + & \underline{11} \end{array}$$



Addition

Three and more 2-digit Addends (carrying required)



$$\begin{array}{r} 1 \\ 37 \\ 16 \\ + \underline{34} \end{array}$$

$$\begin{array}{r} 2 \\ 54 \\ 22 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 3 \\ 29 \\ 40 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 4 \\ 12 \\ 14 \\ + \underline{65} \end{array}$$

$$\begin{array}{r} 5 \\ 28 \\ 18 \\ + \underline{37} \end{array}$$

$$\begin{array}{r} 6 \\ 42 \\ 24 \\ + \underline{29} \end{array}$$

$$\begin{array}{r} 7 \\ 17 \\ 27 \\ + \underline{37} \end{array}$$

$$\begin{array}{r} 8 \\ 43 \\ 13 \\ + \underline{28} \end{array}$$

$$\begin{array}{r} 9 \\ 11 \\ 32 \\ + \underline{37} \end{array}$$

$$\begin{array}{r} 10 \\ 31 \\ 21 \\ + \underline{39} \end{array}$$

$$\begin{array}{r} 11 \\ 16 \\ 26 \\ 16 \\ + \underline{26} \end{array}$$

$$\begin{array}{r} 12 \\ 23 \\ 15 \\ + \underline{18} \end{array}$$

$$\begin{array}{r} 13 \\ 42 \\ 13 \\ + \underline{11} \end{array}$$

$$\begin{array}{r} 14 \\ 34 \\ 14 \\ + \underline{14} \end{array}$$

$$\begin{array}{r} 15 \\ 30 \\ 12 \\ + \underline{15} \end{array}$$

$$\begin{array}{r} 16 \\ 41 \\ 20 \\ 35 \\ + \underline{25} \end{array}$$

$$\begin{array}{r} 17 \\ 15 \\ 75 \\ 15 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 18 \\ 38 \\ 48 \\ 18 \\ + \underline{28} \end{array}$$

$$\begin{array}{r} 19 \\ 37 \\ 17 \\ + \underline{56} \end{array}$$

$$\begin{array}{r} 20 \\ 38 \\ 19 \\ + \underline{44} \end{array}$$

$$\begin{array}{r} 21 \\ 17 \\ 16 \\ 15 \\ 14 \\ + \underline{13} \end{array}$$

$$\begin{array}{r} 22 \\ 21 \\ 14 \\ 16 \\ 20 \\ + \underline{18} \end{array}$$

$$\begin{array}{r} 23 \\ 18 \\ 17 \\ 10 \\ 22 \\ + \underline{19} \end{array}$$

$$\begin{array}{r} 24 \\ 19 \\ 20 \\ 11 \\ 18 \\ + \underline{24} \end{array}$$

$$\begin{array}{r} 25 \\ 21 \\ 12 \\ 13 \\ 11 \\ + \underline{24} \end{array}$$

$$\begin{array}{r} 26 \\ 33 \\ 22 \\ 14 \\ 23 \\ + \underline{43} \end{array}$$

$$\begin{array}{r} 27 \\ 46 \\ 54 \\ 17 \\ 18 \\ + \underline{53} \end{array}$$

$$\begin{array}{r} 28 \\ 63 \\ 46 \\ 75 \\ 80 \\ + \underline{37} \end{array}$$

$$\begin{array}{r} 29 \\ 67 \\ 67 \\ 50 \\ 67 \\ + \underline{47} \end{array}$$

$$\begin{array}{r} 30 \\ 29 \\ 19 \\ 39 \\ 79 \\ + \underline{45} \end{array}$$



Addition

Two 3-digit Addends (no carrying)



| | | | | | | | | | |
|---|---------------|---|---------------|---|---------------|---|---------------|---|--------------|
| 1 | \$1.25 | 2 | 530 ml | 3 | 236 kg | 4 | \$4.60 | 5 | 548 m |
| + | <u>\$2.30</u> | + | <u>253 ml</u> | + | <u>543 kg</u> | + | <u>\$4.35</u> | + | <u>231 m</u> |

| | | | | | | | | | |
|---|---------------|---|---------------|---|---------------|---|---------------|----|---------------|
| 6 | 237 km | 7 | 236 kg | 8 | \$3.55 | 9 | 286 ml | 10 | 530 km |
| + | <u>431 km</u> | + | <u>543 kg</u> | + | <u>\$5.40</u> | + | <u>712 ml</u> | + | <u>264 km</u> |

| | | | | | | | | | |
|----|---------------|----|-----------------|----|---------------|----|--------------|----|---------------|
| 11 | \$2.40 | 12 | 326 days | 13 | 435 kg | 14 | 473 g | 15 | 763 km |
| + | <u>\$7.30</u> | + | <u>512 days</u> | + | <u>354 kg</u> | + | <u>421 g</u> | + | <u>126 km</u> |

| | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 16 | 804 ml | 17 | \$6.45 | 18 | 556 km | 19 | 573 kg | 20 | \$4.20 |
| + | <u>173 ml</u> | + | <u>\$1.30</u> | + | <u>343 km</u> | + | <u>312 kg</u> | + | <u>\$4.55</u> |

| | | | | | | | | | |
|----|--------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 21 | 337 m | 22 | 462 km | 23 | \$5.85 | 24 | 226 ml | 25 | 459 km |
| + | <u>261 m</u> | + | <u>305 km</u> | + | <u>\$2.10</u> | + | <u>761 ml</u> | + | <u>220 km</u> |

| | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|-----------------|
| 26 | \$4.15 | 27 | 556 kg | 28 | 538 km | 29 | \$7.70 | 30 | 324 days |
| + | <u>\$4.50</u> | + | <u>343 kg</u> | + | <u>261 km</u> | + | <u>\$2.15</u> | + | <u>465 days</u> |

| | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|--------------|----|---------------|
| 31 | 618 ml | 32 | 384 km | 33 | \$2.30 | 34 | 129 m | 35 | 363 kg |
| + | <u>260 ml</u> | + | <u>404 km</u> | + | <u>\$6.50</u> | + | <u>720 m</u> | + | <u>535 kg</u> |

| | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 36 | 571 km | 37 | 463 kg | 38 | 447 ml | 39 | \$2.40 | 40 | 568 km |
| + | <u>206 km</u> | + | <u>326 kg</u> | + | <u>351 ml</u> | + | <u>\$3.30</u> | + | <u>220 km</u> |

| | | | | | | | | | |
|----|---------------|----|--------------|----|---------------|----|---------------|----|---------------|
| 41 | \$6.65 | 42 | 384 m | 43 | 517 km | 44 | 335 ml | 45 | 482 kg |
| + | <u>\$1.30</u> | + | <u>404 m</u> | + | <u>240 km</u> | + | <u>452 ml</u> | + | <u>315 kg</u> |



Addition

Two 3-digit Addends (carrying required)



$$\begin{array}{r} 1 \quad \$4.65 \\ + \underline{\$3.45} \\ \hline \end{array} \quad \begin{array}{r} 2 \quad 268 \text{ ml} \\ + \underline{427 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 457 \text{ kg} \\ + \underline{439 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 4 \quad \$2.75 \\ + \underline{\$6.05} \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 278 \text{ m} \\ + \underline{318 \text{ m}} \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 458 \text{ km} \\ + \underline{356 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 547 \text{ kg} \\ + \underline{297 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 8 \quad \$5.65 \\ + \underline{\$1.65} \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 526 \text{ ml} \\ + \underline{187 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 458 \text{ km} \\ + \underline{387 \text{ km}} \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad \$1.70 \\ + \underline{\$5.80} \\ \hline \end{array} \quad \begin{array}{r} 12 \quad 567 \text{ days} \\ + \underline{386 \text{ days}} \\ \hline \end{array} \quad \begin{array}{r} 13 \quad 296 \text{ kg} \\ + \underline{296 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 14 \quad 188 \text{ g} \\ + \underline{649 \text{ g}} \\ \hline \end{array} \quad \begin{array}{r} 15 \quad 566 \text{ km} \\ + \underline{266 \text{ km}} \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 755 \text{ ml} \\ + \underline{155 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 17 \quad \$5.65 \\ + \underline{\$2.75} \\ \hline \end{array} \quad \begin{array}{r} 18 \quad 665 \text{ km} \\ + \underline{168 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 19 \quad 489 \text{ kg} \\ + \underline{295 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 20 \quad \$7.85 \\ + \underline{\$1.55} \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 447 \text{ m} \\ + \underline{268 \text{ m}} \\ \hline \end{array} \quad \begin{array}{r} 22 \quad 395 \text{ km} \\ + \underline{265 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 23 \quad \$4.75 \\ + \underline{\$2.55} \\ \hline \end{array} \quad \begin{array}{r} 24 \quad 356 \text{ ml} \\ + \underline{655 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 25 \quad 366 \text{ km} \\ + \underline{577 \text{ km}} \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad \$6.85 \\ + \underline{\$5.85} \\ \hline \end{array} \quad \begin{array}{r} 27 \quad 758 \text{ kg} \\ + \underline{658 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 28 \quad 432 \text{ km} \\ + \underline{599 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 29 \quad \$7.95 \\ + \underline{\$9.05} \\ \hline \end{array} \quad \begin{array}{r} 30 \quad 768 \text{ days} \\ + \underline{699 \text{ days}} \\ \hline \end{array}$$

$$\begin{array}{r} 31 \quad 755 \text{ ml} \\ + \underline{655 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 32 \quad 898 \text{ km} \\ + \underline{108 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 33 \quad \$9.25 \\ + \underline{\$0.75} \\ \hline \end{array} \quad \begin{array}{r} 34 \quad 785 \text{ m} \\ + \underline{216 \text{ m}} \\ \hline \end{array} \quad \begin{array}{r} 35 \quad 999 \text{ kg} \\ + \underline{444 \text{ kg}} \\ \hline \end{array}$$

$$\begin{array}{r} 36 \quad 706 \text{ km} \\ + \underline{694 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 37 \quad 643 \text{ kg} \\ + \underline{557 \text{ kg}} \\ \hline \end{array} \quad \begin{array}{r} 38 \quad 659 \text{ ml} \\ + \underline{548 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 39 \quad \$5.45 \\ + \underline{\$4.55} \\ \hline \end{array} \quad \begin{array}{r} 40 \quad 407 \text{ km} \\ + \underline{593 \text{ km}} \\ \hline \end{array}$$

$$\begin{array}{r} 41 \quad \$8.75 \\ + \underline{\$6.75} \\ \hline \end{array} \quad \begin{array}{r} 42 \quad 434 \text{ m} \\ + \underline{874 \text{ m}} \\ \hline \end{array} \quad \begin{array}{r} 43 \quad 368 \text{ km} \\ + \underline{899 \text{ km}} \\ \hline \end{array} \quad \begin{array}{r} 44 \quad 698 \text{ ml} \\ + \underline{508 \text{ ml}} \\ \hline \end{array} \quad \begin{array}{r} 45 \quad 999 \text{ kg} \\ + \underline{999 \text{ kg}} \\ \hline \end{array}$$



Subtraction

Basic facts: 1 & 2-digit minuend, 1-digit subtrahend



$$\begin{array}{r} 1 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ - 3 \\ \hline \end{array}$$



Subtraction

2-digit minuend, 1 and 2-digit subtrahend (no borrowing)



| | | | | | | | | | |
|-----------|----------------------------|-----------|----------------------------|-----------|----------------------------|-----------|----------------------------|-----------|----------------------------|
| 1 | - 56 - <u>44</u> | 2 | - 75 - <u>30</u> | 3 | - 36 - <u>4</u> | 4 | - 68 - <u>22</u> | 5 | - 78 - <u>35</u> |
| 6 | - 58 - <u>7</u> | 7 | - 72 - <u>61</u> | 8 | - 84 - <u>42</u> | 9 | - 39 - <u>7</u> | 10 | - 46 - <u>3</u> |
| 11 | - 67 - <u>20</u> | 12 | - 88 - <u>5</u> | 13 | - 67 - <u>23</u> | 14 | - 59 - <u>21</u> | 15 | - 63 - <u>31</u> |
| 16 | - 87 - <u>45</u> | 17 | - 99 - <u>36</u> | 18 | - 95 - <u>3</u> | 19 | - 26 - <u>3</u> | 20 | - 17 - <u>6</u> |
| 21 | - 66 - <u>33</u> | 22 | - 81 - <u>11</u> | 23 | - 45 - <u>5</u> | 24 | - 34 - <u>13</u> | 25 | - 45 - <u>23</u> |
| 26 | - 69 - <u>44</u> | 27 | - 65 - <u>30</u> | 28 | - 68 - <u>17</u> | 29 | - 66 - <u>5</u> | 30 | - 53 - <u>12</u> |
| 31 | - 94 - <u>51</u> | 32 | - 68 - <u>7</u> | 33 | - 47 - <u>31</u> | 34 | - 68 - <u>25</u> | 35 | - 82 - <u>21</u> |
| 36 | - 37 - <u>15</u> | 37 | - 58 - <u>6</u> | 38 | - 49 - <u>4</u> | 39 | - 56 - <u>43</u> | 40 | - 55 - <u>44</u> |
| 41 | - 48 - <u>31</u> | 42 | - 18 - <u>5</u> | 43 | - 27 - <u>6</u> | 44 | - 45 - <u>34</u> | 45 | - 18 - <u>8</u> |
| 46 | - 27 - <u>3</u> | 47 | - 69 - <u>5</u> | 48 | - 73 - <u>21</u> | 49 | - 56 - <u>22</u> | 50 | - 38 - <u>6</u> |



Subtraction

2-digit minuend, 1 & 2-digit subtrahend (borrowing required)

| | | | | | | | | | |
|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|
| 1 | 73 | 2 | 46 | 3 | 50 | 4 | 72 | 5 | 24 |
| - <u>29</u> | | - <u>17</u> | | - <u>4</u> | | - <u>57</u> | | - <u>9</u> | |
| 6 | 42 | 7 | 56 | 8 | 83 | 9 | 41 | 10 | 55 |
| - <u>4</u> | | - <u>28</u> | | - <u>48</u> | | - <u>6</u> | | - <u>8</u> | |
| 11 | 83 | 12 | 72 | 13 | 44 | 14 | 65 | 15 | 90 |
| - <u>26</u> | | - <u>8</u> | | - <u>27</u> | | - <u>17</u> | | - <u>26</u> | |
| 16 | 81 | 17 | 93 | 18 | 91 | 19 | 43 | 20 | 53 |
| - <u>44</u> | | - <u>37</u> | | - <u>7</u> | | - <u>9</u> | | - <u>8</u> | |
| 21 | 64 | 22 | 80 | 23 | 44 | 24 | 32 | 25 | 54 |
| - <u>28</u> | | - <u>11</u> | | - <u>9</u> | | - <u>18</u> | | - <u>29</u> | |
| 26 | 78 | 27 | 66 | 28 | 60 | 29 | 63 | 30 | 44 |
| - <u>39</u> | | - <u>38</u> | | - <u>17</u> | | - <u>7</u> | | - <u>15</u> | |
| 31 | 92 | 32 | 64 | 33 | 40 | 34 | 65 | 35 | 80 |
| - <u>56</u> | | - <u>6</u> | | - <u>31</u> | | - <u>26</u> | | - <u>29</u> | |
| 36 | 32 | 37 | 53 | 38 | 44 | 39 | 55 | 40 | 44 |
| - <u>27</u> | | - <u>6</u> | | - <u>7</u> | | - <u>37</u> | | - <u>16</u> | |
| 41 | 63 | 42 | 37 | 43 | 36 | 44 | 41 | 45 | 27 |
| - <u>39</u> | | - <u>8</u> | | - <u>9</u> | | - <u>36</u> | | - <u>8</u> | |
| 46 | 32 | 47 | 64 | 48 | 77 | 49 | 53 | 50 | 33 |
| - <u>4</u> | | - <u>9</u> | | - <u>28</u> | | - <u>28</u> | | - <u>6</u> | |



Subtraction

3-digit minuend, 2 and 3-digit subtrahend (no borrowing)



| | | | | | | | | | |
|---|------------|---|-----------|---|------------|---|------------|---|-----------|
| 1 | 452 | 2 | 758 | 3 | 794 | 4 | 804 | 5 | 773 |
| - | <u>231</u> | - | <u>45</u> | - | <u>174</u> | - | <u>601</u> | - | <u>51</u> |

| | | | | | | | | | |
|---|------------|---|-----------|---|------------|---|-----------|----|-----------|
| 6 | 707 | 7 | 553 | 8 | 784 | 9 | 999 | 10 | 384 |
| - | <u>305</u> | - | <u>20</u> | - | <u>453</u> | - | <u>74</u> | - | <u>70</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|------------|----|------------|----|-----------|
| 11 | 875 | 12 | 798 | 13 | 908 | 14 | 645 | 15 | 453 |
| - | <u>63</u> | - | <u>756</u> | - | <u>402</u> | - | <u>445</u> | - | <u>42</u> |

| | | | | | | | | | |
|----|------------|----|------------|----|-----------|----|-----------|----|-----------|
| 16 | 649 | 17 | 784 | 18 | 794 | 19 | 879 | 20 | 394 |
| - | <u>431</u> | - | <u>351</u> | - | <u>73</u> | - | <u>57</u> | - | <u>64</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 21 | 674 | 22 | 576 | 23 | 274 | 24 | 974 | 25 | 854 |
| - | <u>543</u> | - | <u>66</u> | - | <u>132</u> | - | <u>42</u> | - | <u>542</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|-----------|----|-----------|----|------------|
| 26 | 885 | 27 | 749 | 28 | 453 | 29 | 897 | 30 | 792 |
| - | <u>55</u> | - | <u>449</u> | - | <u>42</u> | - | <u>97</u> | - | <u>462</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 31 | 330 | 32 | 459 | 33 | 669 | 34 | 438 | 35 | 226 |
| - | <u>310</u> | - | <u>39</u> | - | <u>426</u> | - | <u>34</u> | - | <u>206</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|-----------|----|------------|----|-----------|
| 36 | 658 | 37 | 878 | 38 | 547 | 39 | 388 | 40 | 361 |
| - | <u>37</u> | - | <u>468</u> | - | <u>46</u> | - | <u>168</u> | - | <u>61</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 41 | 419 | 42 | 413 | 43 | 442 | 44 | 699 | 45 | 646 |
| - | <u>206</u> | - | <u>11</u> | - | <u>102</u> | - | <u>90</u> | - | <u>136</u> |



Subtraction

3-digit minuend, 2 & 3-digit subtrahend (borrowing required)



| | | | | | | | | | |
|---|------------|---|-----------|---|------------|---|------------|---|-----------|
| 1 | 562 | 2 | 437 | 3 | 684 | 4 | 650 | 5 | 642 |
| - | <u>348</u> | - | <u>29</u> | - | <u>269</u> | - | <u>223</u> | - | <u>33</u> |

| | | | | | | | | | |
|---|------------|---|-----------|---|------------|---|-----------|----|-----------|
| 6 | 363 | 7 | 452 | 8 | 466 | 9 | 365 | 10 | 578 |
| - | <u>139</u> | - | <u>37</u> | - | <u>148</u> | - | <u>47</u> | - | <u>69</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|------------|----|------------|----|-----------|
| 11 | 693 | 12 | 585 | 13 | 381 | 14 | 491 | 15 | 536 |
| - | <u>55</u> | - | <u>246</u> | - | <u>202</u> | - | <u>268</u> | - | <u>29</u> |

| | | | | | | | | | |
|----|------------|----|------------|----|-----------|----|-----------|----|-----------|
| 16 | 521 | 17 | 545 | 18 | 623 | 19 | 458 | 20 | 467 |
| - | <u>318</u> | - | <u>228</u> | - | <u>17</u> | - | <u>49</u> | - | <u>38</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 21 | 990 | 22 | 648 | 23 | 490 | 24 | 664 | 25 | 376 |
| - | <u>486</u> | - | <u>29</u> | - | <u>245</u> | - | <u>19</u> | - | <u>138</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|-----------|----|-----------|----|------------|
| 26 | 668 | 27 | 529 | 28 | 604 | 29 | 637 | 30 | 700 |
| - | <u>87</u> | - | <u>449</u> | - | <u>42</u> | - | <u>56</u> | - | <u>210</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 31 | 760 | 32 | 210 | 33 | 700 | 34 | 800 | 35 | 600 |
| - | <u>483</u> | - | <u>48</u> | - | <u>458</u> | - | <u>89</u> | - | <u>197</u> |

| | | | | | | | | | |
|----|-----------|----|------------|----|-----------|----|------------|----|-----------|
| 36 | 971 | 37 | 563 | 38 | 476 | 39 | 570 | 40 | 485 |
| - | <u>83</u> | - | <u>199</u> | - | <u>88</u> | - | <u>391</u> | - | <u>86</u> |

| | | | | | | | | | |
|----|------------|----|-----------|----|------------|----|-----------|----|------------|
| 41 | 500 | 42 | 600 | 43 | 701 | 44 | 504 | 45 | 513 |
| - | <u>199</u> | - | <u>23</u> | - | <u>422</u> | - | <u>88</u> | - | <u>296</u> |



Subtraction

4, 5, 6 and 7-digit minuends 4, 5, 6 and 7-digit subtrahends
(no borrowing)

$$\begin{array}{r} 1 \quad 3\ 758 \\ - 1\ 432 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 4\ 689 \\ - 2\ 406 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 1\ 543 \\ - 1\ 012 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 5\ 628 \\ - 2\ 417 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 4\ 067 \\ - 2\ 045 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 7\ 896 \\ - 4\ 023 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 5\ 089 \\ - 2\ 067 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 4\ 145 \\ - 4\ 042 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 55\ 465 \\ - 32\ 034 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 26\ 108 \\ - 15\ 107 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 34\ 563 \\ - 13\ 430 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 67\ 482 \\ - 21\ 341 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 66\ 342 \\ - 43\ 030 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 59\ 909 \\ - 38\ 702 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 90\ 015 \\ - 70\ 003 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 76\ 306 \\ - 35\ 204 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 452\ 087 \\ - 231\ 057 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 563\ 673 \\ - 212\ 421 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 856\ 014 \\ - 543\ 012 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 532\ 501 \\ - 411\ 001 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 727\ 479 \\ - 120\ 123 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 899\ 099 \\ - 609\ 078 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 277\ 034 \\ - 156\ 033 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \quad 469\ 469 \\ - 156\ 264 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 7\ 462\ 126 \\ - 3\ 341\ 003 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad 2\ 100\ 563 \\ - 1\ 000\ 040 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 4\ 067\ 864 \\ - 1\ 056\ 043 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \quad 9\ 586\ 849 \\ - 3\ 056\ 014 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 8\ 669\ 034 \\ - 2\ 532\ 022 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \quad 6\ 648\ 722 \\ - 4\ 234\ 521 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \quad 5\ 799\ 933 \\ - 2\ 456\ 003 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \quad 2\ 494\ 333 \\ - 1\ 340\ 213 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \quad 5\ 674\ 058 \\ - 620\ 005 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \quad 8\ 724\ 643 \\ - 3\ 421 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \quad 2\ 003\ 587 \\ - 2\ 002\ 532 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \quad 3\ 758\ 612 \\ - 30\ 401 \\ \hline \end{array}$$



Subtraction

4, 5, 6 and 7-digit minuends 4, 5, 6 and 7-digit subtrahends
(borrowing required)



$$\begin{array}{r} 1 \quad 4\ 852 \\ - 2\ 316 \end{array}$$

$$\begin{array}{r} 2 \quad 9\ 567 \\ - 3\ 548 \end{array}$$

$$\begin{array}{r} 3 \quad 4\ 026 \\ - 2\ 019 \end{array}$$

$$\begin{array}{r} 4 \quad 9\ 476 \\ - 1\ 499 \end{array}$$

$$\begin{array}{r} 5 \quad 8\ 747 \\ - 5\ 729 \end{array}$$

$$\begin{array}{r} 6 \quad 4\ 655 \\ - 1\ 438 \end{array}$$

$$\begin{array}{r} 7 \quad 6\ 357 \\ - 4\ 149 \end{array}$$

$$\begin{array}{r} 8 \quad 6\ 522 \\ - 3\ 327 \end{array}$$

$$\begin{array}{r} 9 \quad 63\ 465 \\ - 12\ 089 \end{array}$$

$$\begin{array}{r} 10 \quad 43\ 442 \\ - 12\ 367 \end{array}$$

$$\begin{array}{r} 11 \quad 53\ 456 \\ - 22\ 088 \end{array}$$

$$\begin{array}{r} 12 \quad 74\ 176 \\ - 43\ 099 \end{array}$$

$$\begin{array}{r} 13 \quad 53\ 356 \\ - 21\ 189 \end{array}$$

$$\begin{array}{r} 14 \quad 65\ 577 \\ - 14\ 398 \end{array}$$

$$\begin{array}{r} 15 \quad 24\ 178 \\ - 12\ 099 \end{array}$$

$$\begin{array}{r} 16 \quad 58\ 268 \\ - 24\ 179 \end{array}$$

$$\begin{array}{r} 17 \quad 432\ 023 \\ - 101\ 256 \end{array}$$

$$\begin{array}{r} 18 \quad 548\ 268 \\ - 135\ 799 \end{array}$$

$$\begin{array}{r} 19 \quad 575\ 175 \\ - 251\ 488 \end{array}$$

$$\begin{array}{r} 20 \quad 987\ 044 \\ - 266\ 778 \end{array}$$

$$\begin{array}{r} 21 \quad 543\ 255 \\ - 334\ 578 \end{array}$$

$$\begin{array}{r} 22 \quad 943\ 467 \\ - 157\ 789 \end{array}$$

$$\begin{array}{r} 23 \quad 650\ 034 \\ - 421\ 167 \end{array}$$

$$\begin{array}{r} 24 \quad 656\ 200 \\ - 439\ 514 \end{array}$$

$$\begin{array}{r} 25 \quad 5\ 436\ 700 \\ - 1\ 469\ 877 \end{array}$$

$$\begin{array}{r} 26 \quad 4\ 612\ 412 \\ - 2\ 438\ 686 \end{array}$$

$$\begin{array}{r} 27 \quad 5\ 223\ 100 \\ - 3\ 156\ 939 \end{array}$$

$$\begin{array}{r} 28 \quad 7\ 541\ 002 \\ - 2\ 288\ 996 \end{array}$$

$$\begin{array}{r} 29 \quad 6\ 010\ 020 \\ - 1\ 342\ 567 \end{array}$$

$$\begin{array}{r} 30 \quad 7\ 000\ 743 \\ - 5\ 243\ 889 \end{array}$$

$$\begin{array}{r} 31 \quad 6\ 520\ 000 \\ - 3\ 687\ 741 \end{array}$$

$$\begin{array}{r} 32 \quad 6\ 400\ 000 \\ - 3\ 711\ 237 \end{array}$$

$$\begin{array}{r} 33 \quad 7\ 000\ 000 \\ - 521\ 569 \end{array}$$

$$\begin{array}{r} 34 \quad 9\ 000\ 000 \\ - 4\ 111 \end{array}$$

$$\begin{array}{r} 35 \quad 5\ 000\ 000 \\ - 1\ 212\ 111 \end{array}$$

$$\begin{array}{r} 36 \quad 1\ 000\ 000 \\ - 41\ 738 \end{array}$$



Addition & Subtraction

Review



| | | | | | | | | | |
|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
| 1 | 346 | 2 | 809 | 3 | 545 | 4 | 602 | 5 | 679 |
| | $+ \underline{378}$ | | $+ \underline{474}$ | | $+ \underline{859}$ | | $+ \underline{578}$ | | $+ \underline{794}$ |
| 6 | 45 | 7 | 88 | 8 | 58 | 9 | 64 | 10 | 43 |
| | $+ \underline{74}$ | | $+ \underline{52}$ | | $+ \underline{52}$ | | $+ \underline{99}$ | | $+ \underline{27}$ |
| | 32 | | 69 | | 28 | | 65 | | 83 |
| | $+ \underline{48}$ | | $+ \underline{21}$ | | $+ \underline{77}$ | | $+ \underline{64}$ | | $+ \underline{62}$ |
| 11 | 56 | 12 | 33 | 14 | 53 | 15 | 84 | | |
| | $+ \underline{22}$ | | $+ \underline{48}$ | | $+ \underline{78}$ | | $+ \underline{39}$ | | |
| | 68 | | 75 | | 88 | | 84 | | |
| | $+ \underline{94}$ | | $+ \underline{89}$ | | $+ \underline{63}$ | | $+ \underline{23}$ | | |
| | 94 | | 23 | | 53 | | 60 | | |
| 16 | 73 | 17 | 90 | 18 | 55 | 19 | 63 | 20 | 40 |
| | $- \underline{27}$ | | $- \underline{48}$ | | $- \underline{18}$ | | $- \underline{39}$ | | $- \underline{26}$ |
| 21 | 532 | 22 | 645 | 23 | 630 | 24 | 500 | 25 | 600 |
| | $- \underline{278}$ | | $- \underline{89}$ | | $- \underline{279}$ | | $- \underline{396}$ | | $- \underline{467}$ |
| 26 | 6 758 | 27 | 7 600 | 28 | 9 496 | 29 | 7 777 | 30 | 4 000 |
| | $- \underline{1 789}$ | | $- \underline{3 863}$ | | $- \underline{2 678}$ | | $- \underline{1 969}$ | | $- \underline{3 204}$ |
| 31 | 57 467 | 32 | 70 056 | 33 | 30 001 | 34 | 50 002 | 35 | 10 000 |
| | $- \underline{29 768}$ | | $- \underline{20 789}$ | | $- \underline{19 442}$ | | $- \underline{27 888}$ | | $- \underline{7 909}$ |
| 36 | 375 674 | 37 | 901 006 | 38 | 512 801 | 39 | 200 012 | 40 | 600 000 |
| | $- \underline{128 809}$ | | $- \underline{123 088}$ | | $- \underline{318 338}$ | | $- \underline{123 664}$ | | $- \underline{278 992}$ |
| 41 | 5 012 300 | 42 | 7 000 134 | 43 | 4 002 001 | 44 | 4 993 112 | 45 | 9 000 003 |
| | $- \underline{2 132 889}$ | | $- \underline{3 884 012}$ | | $- \underline{1 999 393}$ | | $- \underline{2 880 228}$ | | $- \underline{2 004 009}$ |
| 46 | 5 000 000 | 47 | 3 700 100 | 48 | 4 000 101 | 49 | 4 576 002 | 50 | 6 234 000 |
| | $- \underline{1 999 999}$ | | $- \underline{1 699 099}$ | | $- \underline{3 001 090}$ | | $- \underline{2 947 102}$ | | $- \underline{4 990 028}$ |



Multiplication

Basic facts: Times Tables to 10×10



$$\begin{array}{r} 1 \quad 9 \quad 2 \\ \times \quad 0 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 3 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 4 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 5 \\ \times \quad 5 \\ \hline \end{array} \quad \begin{array}{r} 0 \quad 6 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 8 \quad 7 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 0 \quad 8 \\ \times \quad 1 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 6 \quad 10 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 11 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 12 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 13 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 14 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 15 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 16 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 6 \quad 18 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 19 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 2 \quad 20 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 2 \quad 21 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 22 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 23 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 24 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 8 \quad 26 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 27 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 28 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 29 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 30 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 31 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 32 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \quad 8 \quad 34 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 8 \quad 35 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 36 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 8 \quad 37 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 38 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 8 \quad 39 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 40 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \quad 4 \quad 42 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 8 \quad 43 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 44 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 45 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 46 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \quad 47 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 48 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \quad 2 \quad 50 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 51 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 6 \quad 52 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 7 \quad 53 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 6 \quad 54 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \quad 55 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 56 \\ \times \quad 4 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 57 \quad 2 \quad 58 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 59 \\ \times \quad 10 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 60 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \quad 61 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 3 \quad 62 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 63 \\ \times \quad 6 \\ \hline \end{array} \quad \begin{array}{r} 0 \quad 64 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \quad 0 \quad 66 \\ \times \quad 7 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 67 \\ \times \quad 5 \\ \hline \end{array} \quad \begin{array}{r} 10 \quad 68 \\ \times \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 0 \quad 69 \\ \times \quad 8 \\ \hline \end{array} \quad \begin{array}{r} 6 \quad 70 \\ \times \quad 9 \\ \hline \end{array} \quad \begin{array}{r} 9 \quad 71 \\ \times \quad 2 \\ \hline \end{array} \quad \begin{array}{r} 1 \quad 72 \\ \times \quad 0 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ \times \quad 0 \\ \hline \end{array}$$



Multiplication

1-digit multiplier 2, 3 and 4-digit multiplicands
(no carrying)



$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 4 \\ \hline \end{array}$$



Multiplication

1-digit multiplier 2, 3 and 4-digit multiplicands
(carrying required)



$$\begin{array}{r} 1 \quad 35 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 43 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 26 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 46 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 72 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 48 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 406 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 530 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 374 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 509 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 188 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 569 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 321 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 406 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 109 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 402 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 902 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 765 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 2\ 006 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 6\ 091 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 4\ 218 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 4\ 099 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 4\ 287 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \quad 2\ 806 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 2\ 451 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad 7\ 092 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 3\ 800 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \quad 9\ 213 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 6\ 009 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \quad 4\ 140 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \quad 5\ 008 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \quad 3\ 092 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \quad 1\ 739 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \quad 3\ 900 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \quad 5\ 729 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \quad 5\ 129 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \quad 1\ 290 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \quad 2\ 097 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \quad 9\ 782 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \quad 8\ 219 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \quad 5\ 670 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \quad 2\ 807 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \quad 7\ 900 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \quad 1\ 687 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \quad 6\ 866 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \quad 8\ 756 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \quad 6\ 091 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \quad 9\ 678 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \quad 3\ 675 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \quad 4\ 562 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \quad 1\ 009 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \quad 4\ 536 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \quad 2\ 118 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \quad 9\ 458 \\ \times 3 \\ \hline \end{array}$$



Multiplication

2-digit multiplier 2, 3 and 4-digit multiplicands (no carrying)



$$\begin{array}{r} 1 \quad 32 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 22 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 12 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 30 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 21 \\ \times 24 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 22 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 123 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 133 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 320 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 142 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 302 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 134 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 132 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 121 \\ \times 24 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 112 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 131 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 120 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 321 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 2\ 320 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 4\ 343 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 1\ 200 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 2\ 113 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 2\ 121 \\ \times 24 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \quad 2\ 341 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 2\ 043 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad 1\ 202 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 3\ 320 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \quad 3\ 322 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 4\ 203 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \quad 1\ 300 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \quad 1\ 303 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \quad 1\ 301 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \quad 1\ 201 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \quad 1\ 302 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \quad 3\ 321 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \quad 2\ 333 \\ \times 12 \\ \hline \end{array}$$



Multiplication

2-digit multiplier 2, 3 and 4-digit multiplicands (carrying required)

$$\begin{array}{r} 1 \quad 53 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 23 \\ \times 56 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 73 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 83 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 39 \\ \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 80 \\ \times 59 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 605 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 700 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 532 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 900 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 378 \\ \times 50 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 855 \\ \times 64 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 765 \\ \times 78 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 638 \\ \times 94 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 397 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 842 \\ \times 41 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 539 \\ \times 86 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 947 \\ \times 74 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 5\ 403 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 3\ 450 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 2\ 542 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 5\ 455 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 5\ 199 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \quad 4\ 045 \\ \times 53 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 4\ 186 \\ \times 97 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad 3\ 179 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 6\ 780 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \quad 4\ 539 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 9\ 764 \\ \times 79 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \quad 8\ 759 \\ \times 63 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \quad 4\ 567 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \quad 2\ 678 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \quad 4\ 538 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \quad 9\ 860 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \quad 5\ 437 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \quad 8\ 659 \\ \times 12 \\ \hline \end{array}$$



Multiplication

3-digit multiplier 3-digit multiplicand (no carrying)

1 $\begin{array}{r} 213 \\ \times 302 \\ \hline \end{array}$

2 $\begin{array}{r} 142 \\ \times 122 \\ \hline \end{array}$

3 $\begin{array}{r} 220 \\ \times 404 \\ \hline \end{array}$

4 $\begin{array}{r} 312 \\ \times 231 \\ \hline \end{array}$

5 $\begin{array}{r} 443 \\ \times 212 \\ \hline \end{array}$

6 $\begin{array}{r} 302 \\ \times 123 \\ \hline \end{array}$

7 $\begin{array}{r} 202 \\ \times 444 \\ \hline \end{array}$

8 $\begin{array}{r} 313 \\ \times 212 \\ \hline \end{array}$

9 $\begin{array}{r} 243 \\ \times 220 \\ \hline \end{array}$

10 $\begin{array}{r} 212 \\ \times 343 \\ \hline \end{array}$

11 $\begin{array}{r} 414 \\ \times 222 \\ \hline \end{array}$

12 $\begin{array}{r} 333 \\ \times 210 \\ \hline \end{array}$

13 $\begin{array}{r} 402 \\ \times 112 \\ \hline \end{array}$

14 $\begin{array}{r} 234 \\ \times 212 \\ \hline \end{array}$

15 $\begin{array}{r} 403 \\ \times 102 \\ \hline \end{array}$

16 $\begin{array}{r} 341 \\ \times 122 \\ \hline \end{array}$

17 $\begin{array}{r} 243 \\ \times 220 \\ \hline \end{array}$

18 $\begin{array}{r} 200 \\ \times 414 \\ \hline \end{array}$

19 $\begin{array}{r} 333 \\ \times 300 \\ \hline \end{array}$

20 $\begin{array}{r} 411 \\ \times 200 \\ \hline \end{array}$

21 $\begin{array}{r} 124 \\ \times 202 \\ \hline \end{array}$

22 $\begin{array}{r} 214 \\ \times 222 \\ \hline \end{array}$

23 $\begin{array}{r} 123 \\ \times 321 \\ \hline \end{array}$

24 $\begin{array}{r} 203 \\ \times 302 \\ \hline \end{array}$

25 $\begin{array}{r} 444 \\ \times 222 \\ \hline \end{array}$

26 $\begin{array}{r} 313 \\ \times 131 \\ \hline \end{array}$

27 $\begin{array}{r} 130 \\ \times 320 \\ \hline \end{array}$

28 $\begin{array}{r} 403 \\ \times 202 \\ \hline \end{array}$

29 $\begin{array}{r} 440 \\ \times 220 \\ \hline \end{array}$

30 $\begin{array}{r} 412 \\ \times 212 \\ \hline \end{array}$



Multiplication

3-digit multiplier 3-digit multiplicand (carrying required)

$$\begin{array}{r} 1 \quad 543 \\ \times 435 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 234 \\ \times 502 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 304 \\ \times 215 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 250 \\ \times 430 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 541 \\ \times 340 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 241 \\ \times 305 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 749 \\ \times 362 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 506 \\ \times 798 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 530 \\ \times 753 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 420 \\ \times 980 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 753 \\ \times 489 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 253 \\ \times 607 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 689 \\ \times 503 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 642 \\ \times 497 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 742 \\ \times 389 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 862 \\ \times 689 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 804 \\ \times 237 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 806 \\ \times 793 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 638 \\ \times 617 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 600 \\ \times 800 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 651 \\ \times 705 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 809 \\ \times 764 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 726 \\ \times 438 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \quad 963 \\ \times 789 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 999 \\ \times 222 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \quad 700 \\ \times 438 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 798 \\ \times 600 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \quad 753 \\ \times 289 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 809 \\ \times 125 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \quad 987 \\ \times 987 \\ \hline \end{array}$$

Division

Basic facts: Times Tables to $100 \div 10$



| | | | | | | | |
|----|----------------|----|-----------------|----|----------------|----|----------------|
| 1 | $50 \div 5 =$ | 2 | $0 \div 4 =$ | 3 | $30 \div 6 =$ | 4 | $49 \div 7 =$ |
| 5 | $6 \div 3 =$ | 6 | $72 \div 8 =$ | 7 | $20 \div 2 =$ | 8 | $70 \div 10 =$ |
| 9 | $36 \div 9 =$ | 10 | $10 \div 5 =$ | 11 | $40 \div 4 =$ | 12 | $36 \div 6 =$ |
| 13 | $28 \div 7 =$ | 14 | $15 \div 3 =$ | 15 | $16 \div 8 =$ | 16 | $0 \div 2 =$ |
| 17 | $0 \div 10 =$ | 18 | $27 \div 9 =$ | 19 | $45 \div 5 =$ | 20 | $8 \div 4 =$ |
| 21 | $24 \div 6 =$ | 22 | $56 \div 7 =$ | 23 | $27 \div 3 =$ | 24 | $24 \div 8 =$ |
| 25 | $10 \div 2 =$ | 26 | $100 \div 10 =$ | 27 | $81 \div 9 =$ | 28 | $15 \div 5 =$ |
| 29 | $36 \div 4 =$ | 30 | $42 \div 6 =$ | 31 | $21 \div 7 =$ | 32 | $21 \div 3 =$ |
| 33 | $64 \div 8 =$ | 34 | $12 \div 2 =$ | 35 | $20 \div 10 =$ | 36 | $18 \div 9 =$ |
| 37 | $40 \div 5 =$ | 38 | $12 \div 4 =$ | 39 | $18 \div 6 =$ | 40 | $63 \div 7 =$ |
| 41 | $12 \div 3 =$ | 42 | $32 \div 8 =$ | 43 | $18 \div 2 =$ | 44 | $90 \div 10 =$ |
| 45 | $72 \div 9 =$ | 46 | $20 \div 5 =$ | 47 | $32 \div 4 =$ | 48 | $48 \div 6 =$ |
| 49 | $14 \div 7 =$ | 50 | $18 \div 3 =$ | 51 | $72 \div 8 =$ | 52 | $4 \div 2 =$ |
| 53 | $40 \div 10 =$ | 54 | $63 \div 9 =$ | 55 | $35 \div 5 =$ | 56 | $16 \div 4 =$ |
| 57 | $12 \div 6 =$ | 58 | $35 \div 7 =$ | 59 | $9 \div 3 =$ | 60 | $40 \div 8 =$ |
| 61 | $16 \div 2 =$ | 62 | $80 \div 10 =$ | 63 | $54 \div 9 =$ | 64 | $25 \div 5 =$ |
| 65 | $28 \div 4 =$ | 66 | $54 \div 6 =$ | 67 | $0 \div 7 =$ | 68 | $10 \div 2 =$ |
| 69 | $0 \div 8 =$ | 70 | $6 \div 2 =$ | 71 | $30 \div 10 =$ | 72 | $90 \div 9 =$ |
| 73 | $30 \div 5 =$ | 74 | $20 \div 4 =$ | 75 | $0 \div 6 =$ | 76 | $42 \div 7 =$ |
| 77 | $0 \div 3 =$ | 78 | $80 \div 8 =$ | 79 | $14 \div 2 =$ | 80 | $50 \div 10 =$ |
| 81 | $45 \div 9 =$ | 82 | $0 \div 5 =$ | 83 | $24 \div 4 =$ | 84 | $60 \div 6 =$ |



Division

1 and 2-digit dividend 1-digit divisor
(remainders)



$1 \quad 5 \overline{)9}$

$2 \quad 2 \overline{)3}$

$3 \quad 3 \overline{)5}$

$4 \quad 4 \overline{)7}$

$5 \quad 6 \overline{)8}$

$6 \quad 8 \overline{)9}$

$7 \quad 7 \overline{)9}$

$8 \quad 9 \overline{)11}$

$9 \quad 5 \overline{)7}$

$10 \quad 2 \overline{)9}$

$11 \quad 3 \overline{)7}$

$12 \quad 4 \overline{)11}$

$13 \quad 6 \overline{)11}$

$14 \quad 8 \overline{)14}$

$15 \quad 7 \overline{)13}$

$16 \quad 9 \overline{)28}$

$17 \quad 5 \overline{)8}$

$18 \quad 4 \overline{)9}$

$19 \quad 2 \overline{)7}$

$20 \quad 3 \overline{)13}$

$21 \quad 4 \overline{)19}$

$22 \quad 6 \overline{)16}$

$23 \quad 8 \overline{)27}$

$24 \quad 7 \overline{)29}$

$25 \quad 9 \overline{)53}$

$26 \quad 5 \overline{)13}$

$27 \quad 2 \overline{)13}$

$28 \quad 3 \overline{)17}$

$29 \quad 4 \overline{)26}$

$30 \quad 6 \overline{)27}$

$31 \quad 8 \overline{)43}$

$32 \quad 7 \overline{)40}$

$33 \quad 9 \overline{)70}$

$34 \quad 5 \overline{)23}$

$35 \quad 2 \overline{)19}$

$36 \quad 3 \overline{)23}$

$37 \quad 4 \overline{)38}$

$38 \quad 6 \overline{)51}$

$39 \quad 8 \overline{)70}$

$40 \quad 7 \overline{)50}$

$41 \quad 9 \overline{)84}$

$42 \quad 5 \overline{)44}$

$43 \quad 2 \overline{)21}$

$44 \quad 3 \overline{)34}$

$45 \quad 4 \overline{)43}$

$46 \quad 6 \overline{)63}$

$47 \quad 8 \overline{)67}$

$48 \quad 7 \overline{)3}$

$49 \quad 9 \overline{)98}$

$50 \quad 5 \overline{)84}$

$51 \quad 2 \overline{)23}$

$52 \quad 3 \overline{)32}$

$53 \quad 4 \overline{)51}$

$54 \quad 6 \overline{)80}$

$55 \quad 8 \overline{)84}$

$56 \quad 7 \overline{)75}$

$57 \quad 9 \overline{)93}$

$58 \quad 5 \overline{)72}$

$59 \quad 2 \overline{)31}$

$60 \quad 3 \overline{)40}$

$61 \quad 4 \overline{)82}$

$62 \quad 6 \overline{)91}$

$63 \quad 8 \overline{)89}$

$64 \quad 7 \overline{)83}$

$65 \quad 9 \overline{)95}$

$66 \quad 5 \overline{)51}$

$67 \quad 2 \overline{)41}$

$68 \quad 3 \overline{)71}$

$69 \quad 4 \overline{)93}$

$70 \quad 6 \overline{)99}$

$71 \quad 8 \overline{)92}$

$72 \quad 7 \overline{)99}$



Division

3-digit dividend 1-digit divisor
(no remainders)



| | | | | | | | | | | | | | | | | | |
|----|---|-----|----|---|-----|----|---|-----|----|---|-----|----|---|-----|----|---|-----|
| 1 | 5 | 505 | 2 | 2 | 242 | 3 | 3 | 639 | 4 | 4 | 608 | 5 | 6 | 606 | 6 | 8 | 904 |
| 7 | 7 | 903 | 8 | 9 | 909 | 9 | 5 | 300 | 10 | 2 | 312 | 11 | 3 | 930 | 12 | 4 | 700 |
| 13 | 6 | 900 | 14 | 8 | 816 | 15 | 7 | 854 | 16 | 9 | 900 | 17 | 5 | 725 | 18 | 4 | 412 |
| 19 | 2 | 506 | 20 | 3 | 312 | 21 | 4 | 664 | 22 | 6 | 714 | 23 | 8 | 808 | 24 | 7 | 763 |
| 25 | 9 | 423 | 26 | 5 | 985 | 27 | 2 | 608 | 28 | 3 | 423 | 29 | 4 | 900 | 30 | 6 | 876 |
| 31 | 8 | 992 | 32 | 7 | 812 | 33 | 9 | 171 | 34 | 5 | 375 | 35 | 2 | 432 | 36 | 3 | 450 |
| 37 | 4 | 532 | 38 | 6 | 774 | 39 | 8 | 936 | 40 | 7 | 924 | 41 | 9 | 306 | 42 | 5 | 460 |
| 43 | 2 | 198 | 44 | 3 | 285 | 45 | 4 | 496 | 46 | 6 | 510 | 47 | 8 | 576 | 48 | 7 | 602 |
| 49 | 9 | 234 | 50 | 5 | 215 | 51 | 2 | 176 | 52 | 3 | 198 | 53 | 4 | 372 | 54 | 6 | 402 |
| 55 | 8 | 392 | 56 | 7 | 322 | 57 | 9 | 405 | 58 | 5 | 185 | 59 | 2 | 104 | 60 | 3 | 297 |
| 61 | 4 | 308 | 62 | 6 | 132 | 63 | 8 | 504 | 64 | 7 | 238 | 65 | 9 | 612 | 66 | 5 | 270 |
| 67 | 2 | 176 | 68 | 3 | 714 | 69 | 4 | 188 | 70 | 6 | 504 | 71 | 8 | 104 | 72 | 7 | 105 |



Division

3-digit dividend 1-digit divisor
(remainders)



$$\boxed{1} \quad 5 \overline{)607}$$

$$\boxed{2} \quad 2 \overline{)341}$$

$$\boxed{3} \quad 3 \overline{)430}$$

$$\boxed{4} \quad 4 \overline{)603}$$

$$\boxed{5} \quad 6 \overline{)701}$$

$$\boxed{6} \quad 8 \overline{)803}$$

$$\boxed{7} \quad 7 \overline{)811}$$

$$\boxed{8} \quad 9 \overline{)903}$$

$$\boxed{9} \quad 5 \overline{)307}$$

$$\boxed{10} \quad 2 \overline{)301}$$

$$\boxed{11} \quad 3 \overline{)667}$$

$$\boxed{12} \quad 4 \overline{)563}$$

$$\boxed{13} \quad 6 \overline{)911}$$

$$\boxed{14} \quad 8 \overline{)825}$$

$$\boxed{15} \quad 7 \overline{)871}$$

$$\boxed{16} \quad 9 \overline{)910}$$

$$\boxed{17} \quad 5 \overline{)703}$$

$$\boxed{18} \quad 4 \overline{)423}$$

$$\boxed{19} \quad 2 \overline{)533}$$

$$\boxed{20} \quad 3 \overline{)310}$$

$$\boxed{21} \quad 4 \overline{)603}$$

$$\boxed{22} \quad 6 \overline{)777}$$

$$\boxed{23} \quad 8 \overline{)831}$$

$$\boxed{24} \quad 7 \overline{)789}$$

$$\boxed{25} \quad 9 \overline{)458}$$

$$\boxed{26} \quad 5 \overline{)973}$$

$$\boxed{27} \quad 2 \overline{)623}$$

$$\boxed{28} \quad 3 \overline{)403}$$

$$\boxed{29} \quad 4 \overline{)995}$$

$$\boxed{30} \quad 6 \overline{)871}$$

$$\boxed{31} \quad 8 \overline{)901}$$

$$\boxed{32} \quad 7 \overline{)888}$$

$$\boxed{33} \quad 9 \overline{)170}$$

$$\boxed{34} \quad 5 \overline{)312}$$

$$\boxed{35} \quad 2 \overline{)773}$$

$$\boxed{36} \quad 3 \overline{)424}$$

$$\boxed{37} \quad 4 \overline{)581}$$

$$\boxed{38} \quad 6 \overline{)705}$$

$$\boxed{39} \quad 8 \overline{)911}$$

$$\boxed{40} \quad 7 \overline{)900}$$

$$\boxed{41} \quad 9 \overline{)340}$$

$$\boxed{42} \quad 5 \overline{)457}$$

$$\boxed{43} \quad 2 \overline{)177}$$

$$\boxed{44} \quad 3 \overline{)265}$$

$$\boxed{45} \quad 4 \overline{)409}$$

$$\boxed{46} \quad 6 \overline{)529}$$

$$\boxed{47} \quad 8 \overline{)555}$$

$$\boxed{48} \quad 7 \overline{)640}$$

$$\boxed{49} \quad 9 \overline{)238}$$

$$\boxed{50} \quad 5 \overline{)288}$$

$$\boxed{51} \quad 2 \overline{)179}$$

$$\boxed{52} \quad 3 \overline{)100}$$

$$\boxed{53} \quad 4 \overline{)346}$$

$$\boxed{54} \quad 6 \overline{)411}$$

$$\boxed{55} \quad 8 \overline{)385}$$

$$\boxed{56} \quad 7 \overline{)300}$$

$$\boxed{57} \quad 9 \overline{)411}$$

$$\boxed{58} \quad 5 \overline{)199}$$

$$\boxed{59} \quad 2 \overline{)111}$$

$$\boxed{60} \quad 3 \overline{)281}$$

$$\boxed{61} \quad 4 \overline{)319}$$

$$\boxed{62} \quad 6 \overline{)185}$$

$$\boxed{63} \quad 8 \overline{)599}$$

$$\boxed{64} \quad 7 \overline{)244}$$

$$\boxed{65} \quad 9 \overline{)659}$$

$$\boxed{66} \quad 5 \overline{)253}$$

$$\boxed{67} \quad 2 \overline{)155}$$

$$\boxed{68} \quad 3 \overline{)746}$$

$$\boxed{69} \quad 4 \overline{)165}$$

$$\boxed{70} \quad 6 \overline{)544}$$

$$\boxed{71} \quad 8 \overline{)167}$$

$$\boxed{72} \quad 7 \overline{)188}$$



Division

4, 5, 6 and 7-digit dividends
(no remainders)

1-digit divisors



$$\boxed{1} \quad 5 \overline{)7\ 010}$$

$$\boxed{2} \quad 2 \overline{)3\ 114}$$

$$\boxed{3} \quad 3 \overline{)4\ 353}$$

$$\boxed{4} \quad 4 \overline{)7\ 008}$$

$$\boxed{5} \quad 7 \overline{)9\ 023}$$

$$\boxed{6} \quad 9 \overline{)9\ 108}$$

$$\boxed{7} \quad 5 \overline{)2\ 115}$$

$$\boxed{8} \quad 2 \overline{)5\ 562}$$

$$\boxed{9} \quad 6 \overline{)9\ 114}$$

$$\boxed{10} \quad 8 \overline{)8\ 112}$$

$$\boxed{11} \quad 7 \overline{)8\ 148}$$

$$\boxed{12} \quad 9 \overline{)9\ 801}$$

$$\boxed{13} \quad 2 \overline{)5\ 638}$$

$$\boxed{14} \quad 3 \overline{)3\ 108}$$

$$\boxed{15} \quad 4 \overline{)6\ 112}$$

$$\boxed{16} \quad 6 \overline{)7\ 884}$$

$$\boxed{17} \quad 9 \overline{)46\ 017}$$

$$\boxed{18} \quad 5 \overline{)91\ 155}$$

$$\boxed{19} \quad 2 \overline{)68\ 100}$$

$$\boxed{20} \quad 3 \overline{)40\ 131}$$

$$\boxed{21} \quad 8 \overline{)9\ 232}$$

$$\boxed{22} \quad 7 \overline{)83\ 447}$$

$$\boxed{23} \quad 9 \overline{)12\ 006}$$

$$\boxed{24} \quad 5 \overline{)10\ 235}$$

$$\boxed{25} \quad 4 \overline{)50\ 008}$$

$$\boxed{26} \quad 6 \overline{)71\ 004}$$

$$\boxed{27} \quad 8 \overline{)90\ 016}$$

$$\boxed{28} \quad 7 \overline{)93\ 996}$$

$$\boxed{29} \quad 2 \overline{)16\ 002}$$

$$\boxed{30} \quad 3 \overline{)21\ 654}$$

$$\boxed{31} \quad 4 \overline{)412\ 004}$$

$$\boxed{32} \quad 6 \overline{)50\ 004}$$

$$\boxed{33} \quad 9 \overline{)200\ 124}$$

$$\boxed{34} \quad 5 \overline{)251\ 005}$$

$$\boxed{35} \quad 2 \overline{)103\ 256}$$

$$\boxed{36} \quad 3 \overline{)102\ 162}$$

$$\boxed{37} \quad 8 \overline{)3\ 100\ 136}$$

$$\boxed{38} \quad 7 \overline{)3\ 014\ 557}$$

$$\boxed{39} \quad 9 \overline{)4\ 121\ 001}$$

$$\boxed{40} \quad 5 \overline{)1\ 607\ 110}$$

$$\boxed{41} \quad 4 \overline{)3\ 202\ 108}$$

$$\boxed{42} \quad 6 \overline{)1\ 153\ 002}$$

$$\boxed{43} \quad 8 \overline{)5\ 300\ 368}$$

$$\boxed{44} \quad 7 \overline{)2\ 934\ 463}$$

$$\boxed{45} \quad 2 \overline{)1\ 245\ 002}$$

$$\boxed{46} \quad 3 \overline{)7\ 002\ 240}$$

$$\boxed{47} \quad 4 \overline{)1\ 320\ 120}$$

$$\boxed{48} \quad 6 \overline{)5\ 271\ 240}$$



Division

4, 5, 6 and 7-digit dividends
(remainders)

1-digit divisors



$$\boxed{1} \quad 2 \overline{)5\,637}$$

$$\boxed{2} \quad 3 \overline{)3\,107}$$

$$\boxed{3} \quad 4 \overline{)6\,115}$$

$$\boxed{4} \quad 6 \overline{)7\,887}$$

$$\boxed{5} \quad 6 \overline{)9\,117}$$

$$\boxed{6} \quad 8 \overline{)8\,113}$$

$$\boxed{7} \quad 7 \overline{)8\,145}$$

$$\boxed{8} \quad 9 \overline{)9\,806}$$

$$\boxed{9} \quad 8 \overline{)9\,237}$$

$$\boxed{10} \quad 7 \overline{)83\,444}$$

$$\boxed{11} \quad 9 \overline{)12\,008}$$

$$\boxed{12} \quad 5 \overline{)10\,233}$$

$$\boxed{13} \quad 5 \overline{)7\,013}$$

$$\boxed{14} \quad 2 \overline{)3\,117}$$

$$\boxed{15} \quad 3 \overline{)4\,351}$$

$$\boxed{16} \quad 4 \overline{)7\,007}$$

$$\boxed{17} \quad 7 \overline{)9\,026}$$

$$\boxed{18} \quad 9 \overline{)9\,104}$$

$$\boxed{19} \quad 5 \overline{)2\,118}$$

$$\boxed{20} \quad 2 \overline{)5\,561}$$

$$\boxed{21} \quad 9 \overline{)46\,014}$$

$$\boxed{22} \quad 5 \overline{)91\,158}$$

$$\boxed{23} \quad 2 \overline{)68\,103}$$

$$\boxed{24} \quad 3 \overline{)40\,132}$$

$$\boxed{25} \quad 2 \overline{)16\,003}$$

$$\boxed{26} \quad 3 \overline{)21\,656}$$

$$\boxed{27} \quad 4 \overline{)412\,001}$$

$$\boxed{28} \quad 6 \overline{)50\,007}$$

$$\boxed{29} \quad 4 \overline{)50\,007}$$

$$\boxed{30} \quad 6 \overline{)71\,007}$$

$$\boxed{31} \quad 8 \overline{)90\,015}$$

$$\boxed{32} \quad 7 \overline{)93\,999}$$

$$\boxed{33} \quad 9 \overline{)200\,127}$$

$$\boxed{34} \quad 5 \overline{)251\,003}$$

$$\boxed{35} \quad 2 \overline{)103\,259}$$

$$\boxed{36} \quad 3 \overline{)102\,163}$$

$$\boxed{37} \quad 8 \overline{)3\,100\,139}$$

$$\boxed{38} \quad 7 \overline{)3\,014\,554}$$

$$\boxed{39} \quad 9 \overline{)4\,121\,000}$$

$$\boxed{40} \quad 5 \overline{)1\,607\,117}$$

$$\boxed{41} \quad 4 \overline{)3\,202\,107}$$

$$\boxed{42} \quad 6 \overline{)1\,153\,001}$$

$$\boxed{43} \quad 8 \overline{)5\,300\,868}$$

$$\boxed{44} \quad 7 \overline{)2\,934\,465}$$

$$\boxed{45} \quad 2 \overline{)1\,245\,005}$$

$$\boxed{46} \quad 3 \overline{)7\,002\,242}$$

$$\boxed{47} \quad 4 \overline{)1\,320\,123}$$

$$\boxed{48} \quad 6 \overline{)5\,271\,243}$$



Multiplication & Division Review



1

$$\begin{array}{r} 3\ 678 \\ \times\ 9 \\ \hline \end{array}$$

2

$$\begin{array}{r} 4\ 087 \\ \times\ 7 \\ \hline \end{array}$$

3

$$\begin{array}{r} 4\ 603 \\ \times\ 8 \\ \hline \end{array}$$

4

$$\begin{array}{r} 9\ 531 \\ \times\ 6 \\ \hline \end{array}$$

5

$$\begin{array}{r} 1\ 098 \\ \times\ 5 \\ \hline \end{array}$$

6

$$\begin{array}{r} 5\ 437 \\ \times\ 2 \\ \hline \end{array}$$

7

$$\begin{array}{r} 6\ 789 \\ \times\ 3 \\ \hline \end{array}$$

8

$$\begin{array}{r} 4\ 873 \\ \times\ 4 \\ \hline \end{array}$$

9

$$\begin{array}{r} 603 \\ \times\ 38 \\ \hline \end{array}$$

10

$$\begin{array}{r} 600 \\ \times\ 59 \\ \hline \end{array}$$

11

$$\begin{array}{r} 532 \\ \times\ 67 \\ \hline \end{array}$$

$$\begin{array}{r} 378 \\ \times\ 50 \\ \hline \end{array}$$

13

$$\begin{array}{r} 782 \\ \times\ 543 \\ \hline \end{array}$$

14

$$\begin{array}{r} 643 \\ \times\ 689 \\ \hline \end{array}$$

15

$$\begin{array}{r} 504 \\ \times\ 293 \\ \hline \end{array}$$

$$\begin{array}{r} 478 \\ \times\ 356 \\ \hline \end{array}$$

$$\boxed{4}\ 706$$

$$\boxed{6}\ 507$$

$$\boxed{8}\ 301$$

$$\boxed{5}\ 197$$

$$\boxed{9}\ 7\ 303$$

$$\boxed{2}\ 5\ 917$$

$$\boxed{7}\ 3\ 334$$

$$\boxed{3}\ 2\ 032$$

$$\boxed{4}\ 70\ 003$$

$$\boxed{6}\ 87\ 013$$

$$\boxed{8}\ 35\ 125$$

$$\boxed{5}\ 46\ 008$$

$$\boxed{9}\ 821\ 003$$

$$\boxed{2}\ 543\ 007$$

$$\boxed{7}\ 356\ 788$$

$$\boxed{3}\ 312\ 887$$

$$\boxed{4}\ 5\ 110\ 045$$

$$\boxed{6}\ 8\ 013\ 177$$

$$\boxed{8}\ 3\ 305\ 119$$

$$\boxed{5}\ 4\ 117\ 003$$

Solutions

Page 6

Addition: Basic facts to 18

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 6 | 2 | 10 | 3 | 10 | 4 | 16 | 5 | 9 |
| 6 | 10 | 7 | 12 | 8 | 8 | 9 | 11 | 10 | 9 |
| 11 | 13 | 12 | 14 | 13 | 14 | 14 | 9 | 15 | 10 |
| 16 | 11 | 17 | 9 | 18 | 6 | 19 | 11 | 20 | 12 |
| 21 | 13 | 22 | 18 | 23 | 12 | 24 | 9 | 25 | 8 |
| 26 | 11 | 27 | 6 | 28 | 11 | 29 | 11 | 30 | 15 |
| 31 | 17 | 32 | 9 | 33 | 12 | 34 | 7 | 35 | 12 |
| 36 | 15 | 37 | 8 | 38 | 10 | 39 | 9 | 40 | 15 |
| 41 | 16 | 42 | 13 | 43 | 16 | 44 | 14 | 45 | 13 |
| 46 | 13 | 47 | 12 | 48 | 11 | 49 | 13 | 50 | 14 |

Page 7

Addition: Three and more 1-digit Addends

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 17 | 2 | 15 | 3 | 12 | 4 | 15 | 5 | 14 |
| 6 | 19 | 7 | 20 | 8 | 13 | 9 | 17 | 10 | 13 |
| 11 | 24 | 12 | 15 | 13 | 11 | 14 | 15 | 15 | 22 |
| 16 | 15 | 17 | 20 | 18 | 19 | 19 | 20 | 20 | 20 |
| 21 | 20 | 22 | 18 | 23 | 15 | 24 | 24 | 25 | 25 |
| 26 | 22 | 27 | 19 | 28 | 23 | 29 | 25 | 30 | 21 |
| 31 | 26 | 32 | 22 | 33 | 22 | 34 | 21 | 35 | 18 |
| 36 | 23 | 37 | 21 | 38 | 16 | 39 | 27 | 40 | 25 |

Page 8 Addition: Two 2-digit Addends (no carrying)

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 77 | 2 | 78 | 3 | 59 | 4 | 99 | 5 | 86 |
| 6 | 77 | 7 | 88 | 8 | 88 | 9 | 84 | 10 | 86 |
| 11 | 97 | 12 | 68 | 13 | 85 | 14 | 84 | 15 | 98 |
| 16 | 77 | 17 | 79 | 18 | 99 | 19 | 78 | 20 | 79 |
| 21 | 59 | 22 | 59 | 23 | 74 | 24 | 84 | 25 | 78 |
| 26 | 77 | 27 | 39 | 28 | 95 | 29 | 76 | 30 | 89 |
| 31 | 88 | 32 | 68 | 33 | 98 | 34 | 58 | 35 | 77 |
| 36 | 59 | 37 | 79 | 38 | 57 | 39 | 55 | 40 | 79 |
| 41 | 96 | 42 | 49 | 43 | 57 | 44 | 97 | 45 | 69 |

Page 9 Addition: Two 2-digit Addends (carrying required)

| | | | | | | | | | |
|----|------------|----|------------|----|------------|----|------------|----|------------|
| 1 | 85 | 2 | 75 | 3 | 62 | 4 | 76 | 5 | 90 |
| 6 | 82 | 7 | 80 | 8 | 64 | 9 | 68 | 10 | 81 |
| 11 | 74 | 12 | 81 | 13 | 92 | 14 | 80 | 15 | 72 |
| 16 | 60 | 17 | 93 | 18 | 46 | 19 | 50 | 20 | 90 |
| 21 | 83 | 22 | 96 | 23 | 53 | 24 | 91 | 25 | 72 |
| 26 | 119 | 27 | 109 | 28 | 109 | 29 | 109 | 30 | 119 |
| 31 | 119 | 32 | 109 | 33 | 118 | 34 | 108 | 35 | 109 |
| 36 | 123 | 37 | 123 | 38 | 161 | 39 | 161 | 40 | 112 |
| 41 | 121 | 42 | 153 | 43 | 115 | 44 | 130 | 45 | 118 |

Page 10 Addition: Three and more 2-digit Addends (no carrying)

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 84 | 2 | 68 | 3 | 67 | 4 | 58 | 5 | 73 |
| 6 | 68 | 7 | 69 | 8 | 78 | 9 | 89 | 10 | 77 |
| 11 | 78 | 12 | 89 | 13 | 99 | 14 | 78 | 15 | 89 |
| 16 | 77 | 17 | 89 | 18 | 98 | 19 | 98 | 20 | 58 |
| 21 | 89 | 22 | 78 | 23 | 88 | 24 | 89 | 25 | 88 |
| 26 | 86 | 27 | 98 | 28 | 75 | 29 | 86 | 30 | 96 |

Page 11 Addition: Three and more 2-digit Addends (carrying required)

| | | | | | | | | | |
|----|------------|----|------------|----|------------|----|------------|----|------------|
| 1 | 87 | 2 | 95 | 3 | 82 | 4 | 91 | 5 | 83 |
| 6 | 95 | 7 | 81 | 8 | 84 | 9 | 80 | 10 | 91 |
| 11 | 84 | 12 | 76 | 13 | 81 | 14 | 86 | 15 | 76 |
| 16 | 121 | 17 | 124 | 18 | 132 | 19 | 126 | 20 | 144 |
| 21 | 75 | 22 | 89 | 23 | 86 | 24 | 92 | 25 | 81 |
| 26 | 135 | 27 | 188 | 28 | 301 | 29 | 298 | 30 | 211 |

Page 12 Addition: Two 3-digit Addends (no carrying)

| | | | | | | | | | |
|----|---------------|----|-----------------|----|---------------|----|---------------|----|-----------------|
| 1 | \$3.55 | 2 | 783 ml | 3 | 779 kg | 4 | \$8.95 | 5 | 779 ml |
| 6 | 668 km | 7 | 779 kg | 8 | \$8.95 | 9 | 998 ml | 10 | 794 km |
| 11 | \$9.70 | 12 | 838 days | 13 | 789 kg | 14 | 894 g | 15 | 889 km |
| 16 | 977 ml | 17 | \$7.75 | 18 | 899 km | 19 | 885 kg | 20 | \$8.75 |
| 21 | 598 m | 22 | 767 km | 23 | \$7.95 | 24 | 987 ml | 25 | 679 km |
| 26 | \$8.65 | 27 | 899 kg | 28 | 799 km | 29 | \$9.85 | 30 | 789 days |
| 31 | 878 ml | 32 | 788 km | 33 | \$8.80 | 34 | 849 m | 35 | 898 kg |
| 36 | 777 km | 37 | 789 kg | 38 | 798 ml | 39 | \$5.70 | 40 | 788 km |
| 41 | \$7.95 | 42 | 788 m | 43 | 757 km | 44 | 787 ml | 45 | 797 kg |

Page 13 Addition: Two 3-digit Addends (carrying required)

| | | | | | | | | | |
|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-------------------|
| 1 | \$8.10 | 2 | 695 ml | 3 | 896 kg | 4 | \$8.80 | 5 | 596 ml |
| 6 | 814 km | 7 | 844 kg | 8 | \$7.30 | 9 | 713 ml | 10 | 845 km |
| 11 | \$7.50 | 12 | 953 days | 13 | 592 kg | 14 | 837 g | 15 | 832 km |
| 16 | 910 ml | 17 | \$8.40 | 18 | 833 km | 19 | 784 kg | 20 | \$9.40 |
| 21 | 715 m | 22 | 660 km | 23 | \$7.30 | 24 | 1 011 ml | 25 | 943 km |
| 26 | \$12.70 | 27 | 1 416 kg | 28 | 1 031 km | 29 | \$17 | 30 | 1 467 days |
| 31 | 1 410 ml | 32 | 1 006 km | 33 | \$10 | 34 | 1 001 m | 35 | 1 443 kg |
| 36 | 1 400 km | 37 | 1 200 kg | 38 | 1 207 ml | 39 | \$10 | 40 | 1 000 km |
| 41 | \$15.50 | 42 | 1 308 m | 43 | 1 267 km | 44 | 1 206 ml | 45 | 1 998 kg |

Page 14

Subtraction: Basic facts: 1 & 2-digit minuend, 1-digit subtrahend

| | | | | | | | | | |
|----|----------|----|----------|----|----------|----|----------|----|----------|
| 1 | 6 | 2 | 2 | 3 | 0 | 4 | 3 | 5 | 2 |
| 6 | 2 | 7 | 1 | 8 | 1 | 9 | 7 | 10 | 3 |
| 11 | 1 | 12 | 4 | 13 | 3 | 14 | 0 | 15 | 2 |
| 16 | 2 | 17 | 8 | 18 | 1 | 19 | 5 | 20 | 4 |
| 21 | 1 | 22 | 3 | 23 | 3 | 24 | 1 | 25 | 6 |
| 26 | 1 | 27 | 4 | 28 | 4 | 29 | 2 | 30 | 7 |
| 31 | 5 | 32 | 5 | 33 | 3 | 34 | 1 | 35 | 6 |
| 36 | 4 | 37 | 2 | 38 | 5 | 39 | 9 | 40 | 8 |
| 41 | 8 | 42 | 7 | 43 | 7 | 44 | 7 | 45 | 4 |
| 46 | 7 | 47 | 7 | 48 | 7 | 49 | 9 | 50 | 8 |

Page 15

Subtraction: 2-digit minuend, 1 and 2-digit subtrahend (no borrowing)

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 12 | 2 | 45 | 3 | 32 | 4 | 46 | 5 | 43 |
| 6 | 51 | 7 | 11 | 8 | 42 | 9 | 32 | 10 | 43 |
| 11 | 47 | 12 | 83 | 13 | 44 | 14 | 38 | 15 | 32 |
| 16 | 42 | 17 | 63 | 18 | 92 | 19 | 23 | 20 | 11 |
| 21 | 33 | 22 | 70 | 23 | 40 | 24 | 21 | 25 | 22 |
| 26 | 25 | 27 | 35 | 28 | 51 | 29 | 61 | 30 | 41 |
| 31 | 43 | 32 | 61 | 33 | 16 | 34 | 43 | 35 | 61 |
| 36 | 22 | 37 | 52 | 38 | 45 | 39 | 13 | 40 | 11 |
| 41 | 17 | 42 | 13 | 43 | 21 | 44 | 11 | 45 | 10 |
| 46 | 24 | 47 | 64 | 48 | 52 | 49 | 34 | 50 | 32 |

Page 16 Subtraction: 2-digit minuend, 1 & 2-digit subtrahend (borrowing required)

| | | | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 44 | 2 | 29 | 3 | 46 | 4 | 15 | 5 | 15 |
| 6 | 38 | 7 | 28 | 8 | 35 | 9 | 35 | 10 | 47 |
| 11 | 57 | 12 | 64 | 13 | 17 | 14 | 48 | 15 | 64 |
| 16 | 37 | 17 | 56 | 18 | 84 | 19 | 34 | 20 | 45 |
| 21 | 36 | 22 | 69 | 23 | 35 | 24 | 14 | 25 | 25 |
| 26 | 39 | 27 | 28 | 28 | 43 | 29 | 56 | 30 | 29 |
| 31 | 36 | 32 | 58 | 33 | 9 | 34 | 39 | 35 | 51 |
| 36 | 5 | 37 | 47 | 38 | 37 | 39 | 18 | 40 | 28 |
| 41 | 24 | 42 | 29 | 43 | 27 | 44 | 5 | 45 | 19 |
| 46 | 28 | 47 | 55 | 48 | 49 | 49 | 25 | 50 | 27 |

Page 17 Subtraction: 3-digit minuend, 2 and 3-digit subtrahend (no borrowing)

| | | | | | | | | | |
|----|------------|----|------------|----|------------|----|------------|----|------------|
| 1 | 221 | 2 | 713 | 3 | 620 | 4 | 203 | 5 | 722 |
| 6 | 402 | 7 | 533 | 8 | 331 | 9 | 925 | 10 | 306 |
| 11 | 812 | 12 | 42 | 13 | 506 | 14 | 200 | 15 | 411 |
| 16 | 218 | 17 | 433 | 18 | 721 | 19 | 822 | 20 | 330 |
| 21 | 131 | 22 | 510 | 23 | 142 | 24 | 932 | 25 | 312 |
| 26 | 830 | 27 | 300 | 28 | 411 | 29 | 800 | 30 | 330 |
| 31 | 20 | 32 | 420 | 33 | 243 | 34 | 404 | 35 | 20 |
| 36 | 621 | 37 | 410 | 38 | 501 | 39 | 220 | 40 | 300 |
| 41 | 213 | 42 | 402 | 43 | 340 | 44 | 609 | 45 | 510 |

Page 18 Subtraction: 3-digit minuend, 2 & 3-digit subtrahend (borrowing required)

| | | | | | | | | | |
|----|------------|----|------------|----|------------|----|------------|----|------------|
| 1 | 214 | 2 | 408 | 3 | 415 | 4 | 427 | 5 | 609 |
| 6 | 224 | 7 | 415 | 8 | 318 | 9 | 318 | 10 | 509 |
| 11 | 638 | 12 | 339 | 13 | 179 | 14 | 223 | 15 | 507 |
| 16 | 203 | 17 | 317 | 18 | 606 | 19 | 409 | 20 | 429 |
| 21 | 504 | 22 | 619 | 23 | 245 | 24 | 645 | 25 | 238 |
| 26 | 581 | 27 | 80 | 28 | 562 | 29 | 581 | 30 | 490 |
| 31 | 277 | 32 | 162 | 33 | 242 | 34 | 711 | 35 | 403 |
| 36 | 888 | 37 | 364 | 38 | 388 | 39 | 179 | 40 | 399 |
| 41 | 301 | 42 | 577 | 43 | 279 | 44 | 416 | 45 | 217 |

Page 19 Subtraction: 4, 5, 6 and 7-digit minuends 4, 5, 6 and 7-digit subtrahends (no borrowing)

| | | | | | | | |
|----|------------------|----|------------------|----|------------------|----|------------------|
| 1 | 2 326 | 2 | 2 283 | 3 | 531 | 4 | 3 211 |
| 5 | 2 022 | 6 | 3 873 | 7 | 3 022 | 8 | 103 |
| 9 | 23 431 | 10 | 11 001 | 11 | 21 133 | 12 | 46 141 |
| 13 | 23 312 | 14 | 21 207 | 15 | 20 012 | 16 | 41 102 |
| 17 | 221 030 | 18 | 351 252 | 19 | 313 002 | 20 | 121 500 |
| 21 | 607 356 | 22 | 290 021 | 23 | 121 001 | 24 | 313 205 |
| 25 | 4 121 123 | 26 | 1 100 523 | 27 | 3 011 821 | 28 | 6 530 835 |
| 29 | 6 137 012 | 30 | 2 414 201 | 31 | 3 343 930 | 32 | 1 154 120 |
| 33 | 5 054 053 | 34 | 8 721 222 | 35 | 1 055 | 36 | 3 728 211 |

Page 20 Subtraction: 4, 5, 6 & 7-digit minuends 4, 5, 6 & 7-digit subtrahends (borrowing required)

| | | | | | | | |
|----|------------------|----|------------------|----|------------------|----|------------------|
| 1 | 2 536 | 2 | 6 019 | 3 | 2 007 | 4 | 7 977 |
| 5 | 3 018 | 6 | 3 217 | 7 | 2 208 | 8 | 3 195 |
| 9 | 51 376 | 10 | 31 075 | 11 | 31 368 | 12 | 31 077 |
| 13 | 32 167 | 14 | 51 179 | 15 | 12 079 | 16 | 34 089 |
| 17 | 330 767 | 18 | 412 469 | 19 | 323 687 | 20 | 720 266 |
| 21 | 208 677 | 22 | 785 678 | 23 | 228 867 | 24 | 216 686 |
| 25 | 3 966 823 | 26 | 2 173 726 | 27 | 2 066 161 | 28 | 5 252 006 |
| 29 | 4 667 453 | 30 | 1 756 854 | 31 | 2 832 259 | 32 | 2 688 763 |
| 33 | 6 478 431 | 34 | 8 995 889 | 35 | 3 787 889 | 36 | 958 262 |

Page 21 Addition and Subtraction: Review

| | | | | | | | | | |
|----|------------------|----|------------------|----|------------------|----|------------------|----|------------------|
| 1 | 724 | 2 | 1 283 | 3 | 1 404 | 4 | 1 180 | 5 | 1 473 |
| 6 | 199 | 7 | 230 | 8 | 215 | 9 | 292 | 10 | 215 |
| 11 | 269 | 12 | 315 | 13 | 268 | 14 | 335 | 15 | 290 |
| 16 | 46 | 17 | 42 | 18 | 37 | 19 | 24 | 20 | 14 |
| 21 | 254 | 22 | 556 | 23 | 351 | 24 | 104 | 25 | 133 |
| 26 | 4 969 | 27 | 3 737 | 28 | 6 818 | 29 | 5 808 | 30 | 796 |
| 31 | 27 699 | 32 | 49 267 | 33 | 10 559 | 34 | 22 114 | 35 | 2 091 |
| 36 | 246 865 | 37 | 777 918 | 38 | 194 463 | 39 | 76 348 | 40 | 321 008 |
| 41 | 2 879 411 | 42 | 3 116 122 | 43 | 2 002 608 | 44 | 2 112 884 | 45 | 6 995 994 |
| 46 | 3 000 001 | 47 | 2 001 001 | 48 | 999 011 | 49 | 1 628 900 | 50 | 1 243 972 |

Page 22 Multiplication: Basic facts: Times Tables to 10 x 10

| | | | | | | | | | | | | | | | |
|----|-----------|----|------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 0 | 2 | 80 | 3 | 10 | 4 | 35 | 5 | 0 | 6 | 16 | 7 | 0 | 8 | 45 |
| 9 | 36 | 10 | 40 | 11 | 35 | 12 | 15 | 13 | 72 | 14 | 90 | 15 | 30 | 16 | 8 |
| 17 | 42 | 18 | 12 | 19 | 16 | 20 | 18 | 21 | 42 | 22 | 36 | 23 | 28 | 24 | 18 |
| 25 | 64 | 26 | 81 | 27 | 24 | 28 | 12 | 29 | 49 | 30 | 21 | 31 | 24 | 32 | 27 |
| 33 | 48 | 34 | 32 | 35 | 21 | 36 | 24 | 37 | 56 | 38 | 72 | 39 | 14 | 40 | 18 |
| 41 | 16 | 42 | 56 | 43 | 9 | 44 | 32 | 45 | 36 | 46 | 8 | 47 | 54 | 48 | 28 |
| 49 | 14 | 50 | 27 | 51 | 48 | 52 | 63 | 53 | 12 | 54 | 12 | 55 | 20 | 56 | 63 |
| 57 | 6 | 58 | 100 | 59 | 40 | 60 | 45 | 61 | 6 | 62 | 60 | 63 | 0 | 64 | 24 |
| 65 | 0 | 66 | 50 | 67 | 30 | 68 | 0 | 69 | 54 | 70 | 18 | 71 | 0 | 72 | 0 |

Page 23 Multiplication: 1-digit multiplier 2, 3 and 4-digit multiplicands (no carrying)

| | | | | | | | | | | | |
|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|
| 1 | 69 | 2 | 48 | 3 | 64 | 4 | 84 | 5 | 99 | 6 | 88 |
| 7 | 624 | 8 | 369 | 9 | 848 | 10 | 246 | 11 | 639 | 12 | 448 |
| 13 | 452 | 14 | 309 | 15 | 804 | 16 | 602 | 17 | 936 | 18 | 480 |
| 19 | 6 420 | 20 | 3 609 | 21 | 8 804 | 22 | 2 406 | 23 | 9 603 | 24 | 4 888 |
| 25 | 4 620 | 26 | 6 093 | 27 | 4 848 | 28 | 8 642 | 29 | 9 996 | 30 | 4 008 |
| 31 | 4 628 | 32 | 6 669 | 33 | 4 800 | 34 | 6 284 | 35 | 6 093 | 36 | 4 448 |
| 37 | 8 006 | 38 | 9 036 | 39 | 4 408 | 40 | 8 080 | 41 | 9 990 | 42 | 8 888 |
| 43 | 6 200 | 44 | 6 090 | 45 | 8 884 | 46 | 8 400 | 47 | 9 336 | 48 | 8 004 |
| 49 | 2 886 | 50 | 3 339 | 51 | 8 484 | 52 | 6 882 | 53 | 6 909 | 54 | 8 040 |

Page 24 Multiplication: 1-digit multiplier 2, 3 and 4-digit multiplicands (carrying required)

| | | | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 1 | 140 | 2 | 215 | 3 | 52 | 4 | 138 | 5 | 360 | 6 | 240 |
| 7 | 1 624 | 8 | 2 650 | 9 | 1 122 | 10 | 2 545 | 11 | 376 | 12 | 1 138 |
| 13 | 2 247 | 14 | 2 436 | 15 | 872 | 16 | 3 618 | 17 | 6 314 | 18 | 4 590 |
| 19 | 10 030 | 20 | 12 182 | 21 | 12 654 | 22 | 8 198 | 23 | 12 861 | 24 | 14 030 |
| 25 | 22 059 | 26 | 49 644 | 27 | 30 400 | 28 | 55 278 | 29 | 54 081 | 30 | 28 980 |
| 31 | 45 072 | 32 | 6 184 | 33 | 13 912 | 34 | 11 700 | 35 | 40 103 | 36 | 20 516 |
| 37 | 7 740 | 38 | 10 485 | 39 | 19 564 | 40 | 73 971 | 41 | 39 690 | 42 | 22 456 |
| 43 | 31 600 | 44 | 5 061 | 45 | 61 794 | 46 | 17 512 | 47 | 36 546 | 48 | 48 390 |
| 49 | 29 400 | 50 | 31 934 | 51 | 2 018 | 52 | 40 824 | 53 | 8 472 | 54 | 28 374 |

Page 25 Multiplication:

2-digit multiplier 2, 3 and 4-digit multiplicands (no carrying)

| | | | | | | | | | | | |
|----|---------------|----|---------------|----|----------------|----|---------------|----|----------------|----|---------------|
| 1 | 736 | 2 | 682 | 3 | 504 | 4 | 960 | 5 | 504 | 6 | 726 |
| 7 | 1 476 | 8 | 2 660 | 9 | 4 160 | 10 | 2 982 | 11 | 9 060 | 12 | 2 948 |
| 13 | 4 092 | 14 | 2 904 | 15 | 4 816 | 16 | 4 192 | 17 | 4 080 | 18 | 7 383 |
| 19 | 76 560 | 20 | 86 860 | 21 | 51 600 | 22 | 65 503 | 23 | 50 904 | 24 | 49 161 |
| 25 | 24 516 | 26 | 40 868 | 27 | 106 240 | 28 | 43 186 | 29 | 88 263 | 30 | 29 900 |
| 31 | 26 060 | 32 | 42 933 | 33 | 50 442 | 34 | 39 060 | 35 | 102 951 | 36 | 27 996 |

Page 26 Multiplication:

2-digit multiplier 2, 3 and 4-digit multiplicands (carrying required)

| | | | | | | | | | | | |
|----|----------------|----|----------------|----|----------------|----|----------------|----|----------------|----|----------------|
| 1 | 1 802 | 2 | 1 288 | 3 | 1 825 | 4 | 4 482 | 5 | 1 755 | 6 | 4 720 |
| 7 | 20 570 | 8 | 37 800 | 9 | 29 260 | 10 | 38 700 | 11 | 18 900 | 12 | 54 720 |
| 13 | 59 670 | 14 | 59 972 | 15 | 26 599 | 16 | 34 522 | 17 | 46 354 | 18 | 70 078 |
| 19 | 189 105 | 20 | 148 350 | 21 | 139 810 | 22 | 294 570 | 23 | 218 358 | 24 | 214 385 |
| 25 | 406 042 | 26 | 216 172 | 27 | 196 620 | 28 | 372 198 | 29 | 771 356 | 30 | 551 817 |
| 31 | 91 340 | 32 | 88 374 | 33 | 190 596 | 34 | 295 800 | 35 | 168 547 | 36 | 103 908 |

Page 27 Multiplication:

3-digit multiplier 3-digit multiplicand (no carrying)

| | | | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 1 | 64 326 | 2 | 17 324 | 3 | 88 880 | 4 | 72 072 | 5 | 93 916 | 6 | 37 146 |
| 7 | 89 688 | 8 | 66 356 | 9 | 53 460 | 10 | 72 716 | 11 | 91 908 | 12 | 69 930 |
| 13 | 45 024 | 14 | 49 608 | 15 | 41 106 | 16 | 41 602 | 17 | 53 460 | 18 | 82 800 |
| 19 | 99 900 | 20 | 82 200 | 21 | 25 048 | 22 | 47 508 | 23 | 39 483 | 24 | 61 306 |
| 25 | 98 568 | 26 | 41 003 | 27 | 41 600 | 28 | 81 406 | 29 | 96 800 | 30 | 87 344 |

Page 28 Multiplication:

3-digit multiplier 3-digit multiplicand (carrying required)

| | | | | | | | | | | | |
|----|----------------|----|----------------|----|----------------|----|----------------|----|----------------|----|----------------|
| 1 | 236 205 | 2 | 117 468 | 3 | 65 360 | 4 | 107 500 | 5 | 183 940 | 6 | 73 505 |
| 7 | 271 138 | 8 | 403 788 | 9 | 399 090 | 10 | 411 600 | 11 | 368 217 | 12 | 153 571 |
| 13 | 346 567 | 14 | 319 074 | 15 | 288 638 | 16 | 593 918 | 17 | 190 548 | 18 | 639 158 |
| 19 | 393 646 | 20 | 480 000 | 21 | 458 955 | 22 | 618 076 | 23 | 317 988 | 24 | 759 807 |
| 25 | 221 778 | 26 | 306 600 | 27 | 478 800 | 28 | 217 617 | 29 | 101 125 | 30 | 974 169 |

Page 29 Division: Basic facts: Times Tables to $100 \div 10$

| | | | | | | | |
|----|-----------|----|-----------|----|-----------|----|-----------|
| 1 | 10 | 2 | 0 | 3 | 5 | 4 | 7 |
| 5 | 2 | 6 | 9 | 7 | 10 | 8 | 7 |
| 9 | 4 | 10 | 2 | 11 | 10 | 12 | 6 |
| 13 | 4 | 14 | 5 | 15 | 2 | 16 | 0 |
| 17 | 0 | 18 | 3 | 19 | 9 | 20 | 2 |
| 21 | 4 | 22 | 8 | 23 | 9 | 24 | 3 |
| 25 | 5 | 26 | 10 | 27 | 9 | 28 | 3 |
| 29 | 9 | 30 | 7 | 31 | 3 | 32 | 7 |
| 33 | 8 | 34 | 6 | 35 | 2 | 36 | 2 |
| 37 | 8 | 38 | 3 | 39 | 3 | 40 | 9 |
| 41 | 4 | 42 | 4 | 43 | 9 | 44 | 9 |
| 45 | 8 | 46 | 4 | 47 | 8 | 48 | 8 |
| 49 | 2 | 50 | 6 | 51 | 9 | 52 | 2 |
| 53 | 4 | 54 | 7 | 55 | 7 | 56 | 4 |
| 57 | 2 | 58 | 5 | 59 | 3 | 60 | 5 |
| 61 | 8 | 62 | 8 | 63 | 6 | 64 | 5 |
| 65 | 7 | 66 | 9 | 67 | 0 | 68 | 5 |
| 69 | 0 | 70 | 3 | 71 | 3 | 72 | 10 |
| 73 | 6 | 74 | 5 | 75 | 0 | 76 | 6 |
| 77 | 0 | 78 | 10 | 79 | 7 | 80 | 5 |
| 81 | 5 | 82 | 0 | 83 | 6 | 84 | 10 |

Page 30 Division: 1 and 2-digit dividend 1-digit divisor (remainders)

| | | | | | | | | | | | |
|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|--------------|
| 1 | 1 r4 | 2 | 1 r1 | 3 | 1 r2 | 4 | 1 r3 | 5 | 1 r2 | 6 | 1 r1 |
| 7 | 1 r2 | 8 | 1 r2 | 9 | 1 r2 | 10 | 4 r1 | 11 | 2 r1 | 12 | 2 r3 |
| 13 | 1 r5 | 14 | 1 r6 | 15 | 1 r6 | 16 | 3 r1 | 17 | 1 r3 | 18 | 2 r1 |
| 19 | 3 r1 | 20 | 4 r1 | 21 | 4 r3 | 22 | 2 r4 | 23 | 3 r3 | 24 | 4 r1 |
| 25 | 5 r8 | 26 | 2 r3 | 27 | 6 r1 | 28 | 5 r2 | 29 | 6 r2 | 30 | 4 r3 |
| 31 | 5 r3 | 32 | 5 r5 | 33 | 7 r7 | 34 | 4 r3 | 35 | 9 r1 | 36 | 7 r2 |
| 37 | 9 r2 | 38 | 8 r3 | 39 | 8 r6 | 40 | 7 r1 | 41 | 9 r3 | 42 | 8 r4 |
| 43 | 10 r1 | 44 | 11 r1 | 45 | 10 r3 | 46 | 10 r3 | 47 | 8 r3 | 48 | 0 r3 |
| 49 | 10 r8 | 50 | 16 r4 | 51 | 11 r1 | 52 | 10 r2 | 53 | 12 r3 | 54 | 13 r2 |
| 55 | 10 r4 | 56 | 10 r5 | 57 | 10 r3 | 58 | 14 r2 | 59 | 15 r1 | 60 | 13 r1 |
| 61 | 20 r2 | 62 | 15 r1 | 63 | 11 r1 | 64 | 11 r6 | 65 | 10 r5 | 66 | 10 r1 |
| 67 | 20 r1 | 68 | 23 r2 | 69 | 23 r1 | 70 | 16 r3 | 71 | 11 r4 | 72 | 14 r1 |

Page 31 Division: 3-digit dividend 1-digit divisor (no remainders)

| | | | | | | | | | | | |
|----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|
| 1 | 101 | 2 | 121 | 3 | 213 | 4 | 152 | 5 | 101 | 6 | 113 |
| 7 | 129 | 8 | 101 | 9 | 60 | 10 | 156 | 11 | 310 | 12 | 175 |
| 13 | 150 | 14 | 102 | 15 | 122 | 16 | 100 | 17 | 145 | 18 | 103 |
| 19 | 253 | 20 | 104 | 21 | 166 | 22 | 119 | 23 | 101 | 24 | 109 |
| 25 | 47 | 26 | 197 | 27 | 304 | 28 | 141 | 29 | 225 | 30 | 146 |
| 31 | 124 | 32 | 116 | 33 | 19 | 34 | 75 | 35 | 216 | 36 | 150 |
| 37 | 133 | 38 | 129 | 39 | 117 | 40 | 132 | 41 | 34 | 42 | 92 |
| 43 | 99 | 44 | 95 | 45 | 124 | 46 | 85 | 47 | 72 | 48 | 86 |
| 49 | 26 | 50 | 43 | 51 | 88 | 52 | 66 | 53 | 93 | 54 | 67 |
| 55 | 49 | 56 | 46 | 57 | 45 | 58 | 37 | 59 | 52 | 60 | 99 |
| 61 | 77 | 62 | 22 | 63 | 63 | 64 | 34 | 65 | 68 | 66 | 54 |
| 67 | 88 | 68 | 238 | 69 | 47 | 70 | 84 | 71 | 13 | 72 | 15 |

Page 32 Division: 3-digit dividend 1-digit divisor (remainders)

| | | | | | | | | | | | |
|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 1 | 121 r2 | 2 | 170 r1 | 3 | 143 r1 | 4 | 150 r3 | 5 | 116 r5 | 6 | 100 r3 |
| 7 | 115 r6 | 8 | 100 r3 | 9 | 61 r2 | 10 | 150 r1 | 11 | 222 r1 | 12 | 140 r3 |
| 13 | 151 r5 | 14 | 103 r1 | 15 | 124 r3 | 16 | 101 r1 | 17 | 140 r3 | 18 | 105 r3 |
| 19 | 266 r1 | 20 | 103 r1 | 21 | 150 r3 | 22 | 129 r3 | 23 | 103 r7 | 24 | 112 r5 |
| 25 | 50 r8 | 26 | 194 r3 | 27 | 311 r1 | 28 | 134 r1 | 29 | 248 r3 | 30 | 145 r1 |
| 31 | 112 r5 | 32 | 126 r6 | 33 | 18 r8 | 34 | 62 r2 | 35 | 386 r1 | 36 | 141 r1 |
| 37 | 145 r1 | 38 | 117 r3 | 39 | 113 r7 | 40 | 128 r4 | 41 | 37 r7 | 42 | 91 r2 |
| 43 | 88 r1 | 44 | 88 r1 | 45 | 102 r1 | 46 | 88 r1 | 47 | 69 r3 | 48 | 91 r3 |
| 49 | 26 r4 | 50 | 57 r3 | 51 | 89 r1 | 52 | 33 r1 | 53 | 86 r2 | 54 | 68 r3 |
| 55 | 48 r1 | 56 | 42 r6 | 57 | 45 r6 | 58 | 39 r4 | 59 | 55 r1 | 60 | 93 r2 |
| 61 | 79 r3 | 62 | 30 r5 | 63 | 74 r7 | 64 | 34 r6 | 65 | 73 r2 | 66 | 50 r3 |
| 67 | 77 r1 | 68 | 248 r2 | 69 | 41 r1 | 70 | 90 r4 | 71 | 20 r7 | 72 | 26 r6 |

Page 33 Division: 4, 5, 6 and 7-digit dividends 1-digit divisors (no remainders)

| | | | | | | | |
|----|----------------|----|------------------|----|----------------|----|----------------|
| 1 | 1 402 | 2 | 1 557 | 3 | 1 451 | 4 | 1 752 |
| 5 | 1 289 | 6 | 1 012 | 7 | 423 | 8 | 2781 |
| 9 | 1 519 | 10 | 1 014 | 11 | 1 164 | 12 | 1 089 |
| 13 | 2 819 | 14 | 1 036 | 15 | 1 528 | 16 | 1 314 |
| 17 | 5 113 | 18 | 18 231 | 19 | 34 050 | 20 | 13 377 |
| 21 | 1 154 | 22 | 11 921 | 23 | 1 334 | 24 | 2 047 |
| 25 | 12 502 | 26 | 11 834 | 27 | 11 252 | 28 | 13 428 |
| 29 | 8 001 | 30 | 7 218 | 31 | 103 001 | 32 | 8 334 |
| 33 | 22 236 | 34 | 50 201 | 35 | 51 628 | 36 | 34 054 |
| 37 | 387 517 | 38 | 430 651 | 39 | 457 889 | 40 | 321 422 |
| 41 | 800 527 | 42 | 192 167 | 43 | 662 546 | 44 | 419 209 |
| 45 | 622 501 | 46 | 2 334 080 | 47 | 330 030 | 48 | 878 540 |

Page 34 Division: 4, 5, 6 and 7-digit dividends 1-digit divisors (remainders)

| | | | | | | | |
|----|-------------------|----|---------------------|----|-------------------|----|-------------------|
| 1 | 2 818 r1 | 2 | 1 035 r2 | 3 | 1 528 r3 | 4 | 1 314 r3 |
| 5 | 1 519 r3 | 6 | 1 014 r1 | 7 | 1 163 r4 | 8 | 1 089 r5 |
| 9 | 1 154 r5 | 10 | 11 920 r4 | 11 | 1 334 r2 | 12 | 2 046 r3 |
| 13 | 1 402 r3 | 14 | 1 558 r1 | 15 | 1 450 r1 | 16 | 1 751 r3 |
| 17 | 1 289 r3 | 18 | 1 011 r5 | 19 | 423 r3 | 20 | 2780 r1 |
| 21 | 5 112 r6 | 22 | 18 231 r3 | 23 | 34 051 r1 | 24 | 13 377 r1 |
| 25 | 8 001 r1 | 26 | 7 218 r2 | 27 | 103 000 r1 | 28 | 8 334 r3 |
| 29 | 12 501 r3 | 30 | 11 834 r3 | 31 | 11 251 r7 | 32 | 13 428 r3 |
| 33 | 22 236 r3 | 34 | 50 200 r3 | 35 | 51 629 r1 | 36 | 34 054 r1 |
| 37 | 387 517 r3 | 38 | 430 650 r4 | 39 | 457 888 r8 | 40 | 321 423 r2 |
| 41 | 800 526 r3 | 42 | 192 166 r5 | 43 | 662 608 r4 | 44 | 419 209 r2 |
| 45 | 622 502 r1 | 46 | 2 334 080 r2 | 47 | 330 030 r3 | 48 | 878 540 r3 |

| | | | | | | | |
|----|---------------------|----|---------------------|----|-------------------|----|-------------------|
| 1 | 33 102 | 2 | 28 609 | 3 | 36 824 | 4 | 57 186 |
| 5 | 5 490 | 6 | 10 874 | 7 | 20 367 | 8 | 19 492 |
| 9 | 22 914 | 10 | 35 400 | 11 | 35 644 | 12 | 18 900 |
| 13 | 424 626 | 14 | 443 027 | 15 | 147 672 | 16 | 170 168 |
| 17 | 176 r2 | 18 | 84 r3 | 19 | 37 r5 | 20 | 39 r2 |
| 21 | 811 r4 | 22 | 2 958 r1 | 23 | 476 r2 | 24 | 677 r1 |
| 25 | 17 500 r3 | 26 | 14 502 r1 | 27 | 4 390 r5 | 28 | 9 201 r3 |
| 29 | 91 222 r5 | 30 | 271 503 r1 | 31 | 50 969 r5 | 32 | 104 295 r2 |
| 33 | 1 277 511 r1 | 34 | 1 335 529 r3 | 35 | 413 139 r7 | 36 | 823 400 r3 |

*Calculators...invented
by humans so that
they don't have to use
their brains.*

*Brains are like bodies.
They need regular exercise.*

