

4 Mental + and -



Adding and Subtracting

A The Basics

Adding and subtracting can be done mentally by splitting the second number. Think about how to get a tidy number.

Examples : a) $84 + 8 = \dots\dots\dots$ b) $71 - 6 = \dots\dots\dots$

Think : a) $84 + 8 = 84 + 6 + 2 = 92$

b) $71 - 6 = 71 - 1 - 5 = 65$

1 Add

a) $68 + 7 = \dots\dots\dots$ b) $45 + 9 = \dots\dots\dots$

c) $77 + 8 = \dots\dots\dots$ d) $96 + 5 = \dots\dots\dots$

e) $144 + 8 = \dots\dots\dots$ f) $357 + 6 = \dots\dots\dots$

g) $506 + 6 = \dots\dots\dots$ h) $994 + 7 = \dots\dots\dots$

2 Subtract

a) $75 - 9 = \dots\dots\dots$ b) $83 - 6 = \dots\dots\dots$

c) $52 - 8 = \dots\dots\dots$ d) $61 - 4 = \dots\dots\dots$

e) $196 - 7 = \dots\dots\dots$ f) $243 - 5 = \dots\dots\dots$

g) $724 - 8 = \dots\dots\dots$ h) $501 - 9 = \dots\dots\dots$

3 Now try these.

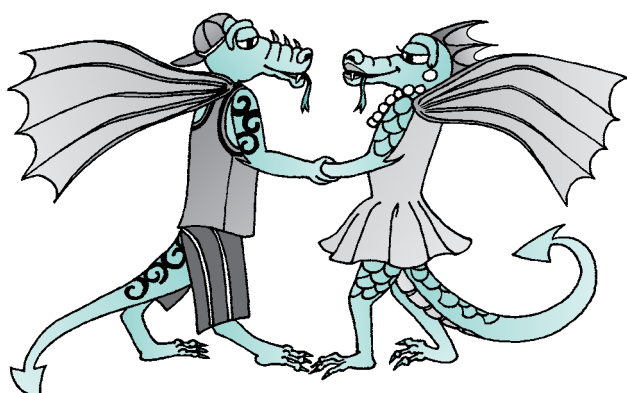
a) $84 + 29 = 84 + 6 + 23 = \dots\dots\dots$

b) $145 + 36 = \dots\dots\dots$

c) $328 + 55 = \dots\dots\dots$

d) $360 + 170 = \dots\dots\dots$

e) $680 + 540 = \dots\dots\dots$



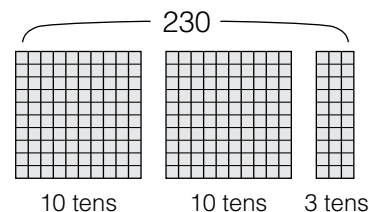
B Up or Down in Tens

- 1 A bank teller hands over \$350 in notes of 10 dollars. How many notes should there be?

$\dots\dots\dots$

- 2 The teacher asked the class to work out $230 + 80$ and $230 - 80$. Here's Tyler's strategy.

- a) He cuts the number 230 into strips of 10. How many tens are there in 230?



$\dots\dots\dots$ 10 tens 10 tens 3 tens

- b) How many tens are there in 80? $\dots\dots\dots$

- c) Complete : $23 \text{ tens} + 8 \text{ tens} = \dots\dots\dots \text{ tens}$

therefore $230 + 80 = \dots\dots\dots$

- d) Complete : $23 \text{ tens} - 8 \text{ tens} = \dots\dots\dots \text{ tens}$

therefore $230 - 80 = \dots\dots\dots$

Examples : Calculate

1a) $460 + 70$

b) $510 - 80$

2a) $243 + 80$

b) $625 - 60$

Working :

1a) 46 tens plus 7 tens is 53 tens

Answer : 530

b) 51 tens minus 8 tens is 43 tens

Answer : 430

2a) 24 tens (and 3) plus 8 tens

is 32 tens (and 3)

Answer : 323

b) 62 tens (and 5) minus 6 tens

is 56 tens (and 5)

Answer : 565

3a) $340 + 50 = \dots\dots\dots$ b) $580 + 60 = \dots\dots\dots$

c) $680 + 50 = \dots\dots\dots$ d) $440 + 90 = \dots\dots\dots$

e) $380 - 70 = \dots\dots\dots$ f) $250 - 90 = \dots\dots\dots$

g) $720 - 40 = \dots\dots\dots$ h) $960 - 80 = \dots\dots\dots$

4a) $335 + 60 = \dots\dots\dots$ b) $483 + 70 = \dots\dots\dots$

c) $228 + 90 = \dots\dots\dots$ d) $694 + 50 = \dots\dots\dots$

e) $297 - 50 = \dots\dots\dots$ f) $315 - 30 = \dots\dots\dots$

g) $503 - 60 = \dots\dots\dots$ h) $762 - 90 = \dots\dots\dots$



Multiplying and Dividing

Mental x and \div 25

A Multiplication

Examples : Work out mentally.

a) 20×6 b) 7×500

Working :

We can work these out by splitting off tens and hundreds.

a) $20 \times 6 = 10 \times 2 \times 6 = 10 \times 12 = 120$

b) $7 \times 500 = 7 \times 5 \times 100 = 35 \times 100 = 3500$

1 Work out mentally.

a) $30 \times 4 = \dots\dots\dots$ b) $6 \times 40 = \dots\dots\dots$

c) $9 \times 20 = \dots\dots\dots$ d) $50 \times 3 = \dots\dots\dots$

e) $70 \times 5 = \dots\dots\dots$ f) $80 \times 2 = \dots\dots\dots$

2a) $2 \times 600 = \dots\dots\dots$ b) $300 \times 3 = \dots\dots\dots$

c) $800 \times 3 = \dots\dots\dots$ d) $5 \times 500 = \dots\dots\dots$

e) $9 \times 700 = \dots\dots\dots$ f) $600 \times 8 = \dots\dots\dots$

3a) $4 \times 9000 = \dots\dots\dots$

b) $7000 \times 3 = \dots\dots\dots$

4 Fill in the missing number.

a) $3 \times \dots\dots\dots = 210$ b) $\dots\dots\dots \times 2 = 1800$

c) $5 \times \dots\dots\dots = 1500$ d) $300 \times \dots\dots\dots = 1200$

e) $600 \times \dots\dots\dots = 3600$ f) $4 \times \dots\dots\dots = 3200$

5 Zoe found a way to multiply 32 by 20. She says,
"20 lots of 32 is twice as much as 10 lots of 32."
 $10 \times 32 = 320$, so $20 \times 32 = 640$

Use Zoe's way to calculate.

a) $20 \times 15 \dots\dots\dots$

$\dots\dots\dots$

b) $30 \times 12 \dots\dots\dots$

$\dots\dots\dots$

c) $30 \times 40 \dots\dots\dots$

$\dots\dots\dots$

B Division

Examples : Calculate

a) $280 \div 4$ b) $\frac{4500}{9}$

Working :

a) Since $4 \times 70 = 280$, then $280 \div 4 = 70$

b) Since $9 \times 500 = 4500$, then $\frac{4500}{9} = 500$

1 Complete

a) Since $2 \times \dots\dots\dots = 180$, then $180 \div 2 = \dots\dots\dots$

b) Since $5 \times \dots\dots\dots = 1500$, then $1500 \div 5 = \dots\dots\dots$

c) Since $6 \times \dots\dots\dots = 360$, then $\frac{360}{6} = \dots\dots\dots$

d) Since $4 \times \dots\dots\dots = 3200$, then $\frac{3200}{4} = \dots\dots\dots$

2 Divide

a) $240 \div 3 = \dots\dots\dots$ b) $800 \div 4 = \dots\dots\dots$

c) $250 \div 5 = \dots\dots\dots$ d) $2100 \div 3 = \dots\dots\dots$

e) $\frac{1600}{8} = \dots\dots\dots$ f) $\frac{120}{4} = \dots\dots\dots$

3 Dylan must place 2500 eggs in cartons which hold 6 eggs each. Dylan knows 100 cartons hold 600 eggs, 10 cartons hold 60 eggs.

How many cartons will be filled? Any eggs left?

$\dots\dots\dots$

$\dots\dots\dots$

$\dots\dots\dots$

$\dots\dots\dots$

$\dots\dots\dots$

$\dots\dots\dots$

Answer :

$\dots\dots\dots$ cartons filled

$\dots\dots\dots$ eggs left over.



42 Fraction Problems



Fractions

A Cutting up the Remainders

Example : Seven pies are shared equally between 5 friends.
How much pie does each get?

Working :



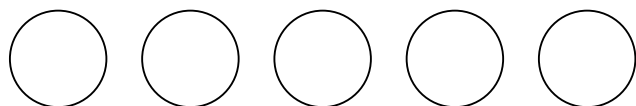
We can give each friend one whole pie then we cut the remaining two pies into five equal pieces.

Each friend gets 1 whole pie and $\frac{1}{5}$ and $\frac{1}{5}$, which is *one and two fifths*.

You can write a number sentence as follows

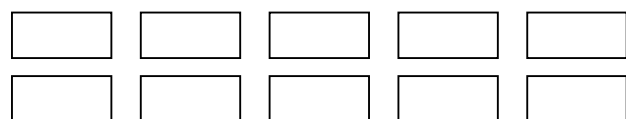
either $\frac{1}{5}$ of 7 = $1\frac{2}{5}$ or $7 \div 5 = 1\frac{2}{5}$

- 1 Five pies are shared equally between 4 friends.



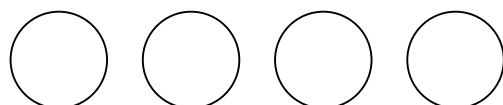
- a) Divide the pies. Colour one share red.
b) Complete : $\frac{1}{4}$ of 5 = ; $5 \div 4 =$

- 2 Ten chocolate bars are shared evenly between three sisters.



- a) Divide the bars. Colour one share red.
b) Complete : $\frac{1}{3}$ of 10 = ; $10 \div 3 =$

- 3 Use the 4 circles to work these out.
Use pencil!



- a) $\frac{1}{3}$ of 4 = ; $4 \div 3 =$
b) $\frac{1}{6}$ of 4 = ; $4 \div 6 =$
c) $\frac{1}{5}$ of 4 = ; $4 \div 5 =$
d) $\frac{1}{8}$ of 4 = ; $4 \div 8 =$

B Siblings

- 1 Anna wants to share 6 mini pizzas between 5 people. Write instructions for Anna on how to do this.

.....
.....
.....

- 2a) Hemi's baby sister sleeps for $\frac{5}{8}$ of a full day.

What fraction of the day is the baby awake?

- b) How many hours is the baby awake each day?

.....

- 3 Use a calculator to work these out.

- a) $\frac{2}{3}$ of \$20.70
b) $\frac{3}{8}$ of 1344 kilometres

- 4 Jake has a bag with balloons. He gives $\frac{3}{4}$ of the balloons to his sister Ruby. If Ruby gets nine balloons, how many were there in the bag at the start?

.....

- 5 Dad bought a slab of chocolate which had six equal bars. He gave 2 bars to me, he gave 1 bar to my little brother and he ate the rest himself.

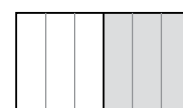
- a) What fraction of the slab did I get?



- b) What fraction of the slab did my brother get?



- c) What fraction of the slab did dad get?



- d) Complete : $1 - \frac{1}{3} - \frac{1}{6} =$



Decimals

Decimal Problems 1

57

A Estimating and Calculating

- 1 Mark went out to buy an iPod.
The list shows what he bought.



item	price	estimate
iPod	\$ 249.00
earphones	\$ 44.95
belt pouch	\$ 27.50
computer cable	\$ 7.25
Total	

- a) Jot down an estimated whole dollar price for each item.
- b) Add all estimates in your head.
Write this total on the table also.
- c) Now work out the real total amount Mark has to pay.
- d) Is your estimate close to the real total? Is it lower or is it higher? By how much?

.....

- 2 A clothing factory needs 1.95 metres of fabric for each school uniform skirt.
They will be making 300 of these skirts.



- a) Round 1.95 to the nearest whole number.
- b) Estimate how many metres of fabric are needed for 300 skirts.
- c) Use your calculator to calculate the precise amount of fabric needed.
- 3a) One action figure costs \$26.35. Round \$26.35 to the nearest dollar.
- b) Estimate the cost of 4 action figures.
- c) Use a calculator to find the exact cost of 4 action figures.

B Gardening

For each question estimate the answer first, then use a calculator for the exact answer.

- 1 Four litres of fence paint cost \$58.40. How much is that per litre?

Estimation : Calculation :

- 2 Plastic garden hose costs \$1.85 per metre and a reel costs \$24.95. How much does a reel with 10 metres of garden hose cost?

Estimation :

Calculation :

- 3 A fence has 5 sections which are 3.42 m long and 2 sections which are 2.95 m long. How long is it in total?

Estimation :

Calculation :

62 Continue a Pattern



Algebra

A Number Chains

1 Work out the nature of the pattern. Then continue each number chain with two more numbers.

- 5, 14, 23, 32,,
- 267, 277, 287, 297,,
- 2.2, 2.4, 2.6, 2.8,,
- 7, 4, 1, -2,,

2 Fill in the missing numbers in these chains.

- 7,, 21, 28,, 42,
- 46,, 58, 64,, 76
- 1.98,,, 2.01,, 2.03
-,, 1.2, 1.6,, 2.4

B Patterns with Shapes

1 Draw the next shape in these chains of shapes.

a) , , ,

b) , , ,

2 Draw the missing shape in the chain.

a) ,, , ,

b) , ,, ,

c) ,, , ,

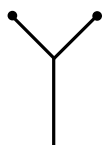
C Budding Plants

The 3 diagrams below show the growth of a plant over 3 years.

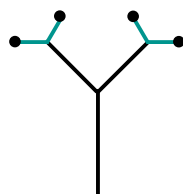


1 Count the number of buds on the plant. Fill in this table.

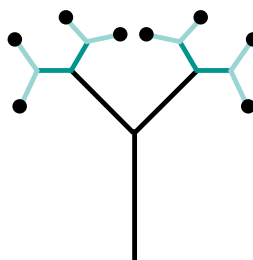
year	1	2	3	
number of buds	2			



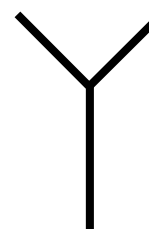
Year 1



Year 2



Year 3



Year 4

2a) How many buds do you expect the plant to have in year 4?

b) Finish the drawing of the plant in year 4.

3a) Describe what happens to the number of buds each year.

b) If this plant continues to grow this way, how many buds do you expect in year 8?



Measurement

Measuring Length 2 81

A Kilometres and Metres

Kilometre is the unit used for measuring long distances.

$$1 \text{ km} = 1000 \text{ m} \quad \frac{1}{10} \text{ km} = 100 \text{ m}$$

In decimals $0.1 \text{ km} = 100 \text{ m}$

Example :

- Describe the distance 8.3 km using km and m.
- Write the distance 8.3 km in metres only.

Working :

- $8.3 \text{ km} = 8 \text{ km} + 0.3 \text{ km} = 8 \text{ km and } 300 \text{ m.}$
- $8.3 \text{ km} = 8000 \text{ m} + 300 \text{ m} = 8300 \text{ m.}$

- Describe the distance 5.8 km using km and m.

$$5.8 \text{ km} = 5 \text{ km} + 0.8 \text{ km}$$

$$\text{this is } 5 \text{ km and } \dots \text{ m}$$

- Write the distance 5.8 km in metres only.

.....

- How many metres in each?

- $0.2 \text{ km} = \dots \text{ m}$

- $4 \text{ km} = \dots \text{ m}$

- $4.2 \text{ km} = \dots \text{ m}$



- The cross-country track is 3 km long. Ruby ran the cross-country track and then she ran 400 m back home.

What is the total distance of Ruby's run? Write your answer in metres first and then in kilometres.

$$3 \text{ km} + 400 \text{ m equals}$$

..... metres or

..... kilometres

- How many kilometres in each?

- $6500 \text{ m} = \dots \text{ km}$

- $70\,000 \text{ m} = \dots \text{ km}$

- $800 \text{ m} = \dots \text{ km}$

B Coin Trail

- The students of Bay View School make a coin trail to raise money for the children's hospital. Six hundred pupils each brought a dollar coin to lay on the trail. We will estimate the length of the coin trail.



- Measure the width of a dollar coin. Round your answer to the nearest centimetre.

The width of a dollar coin is about cm.

- About how long will the trail of 600 coins be?

.....

- Change your answer from centimetres to metres.

.....

- If you cut 128 cm off a 3 m rope, how long is the left over piece? Give your answer first in centimetres, then change to metres.

.....

.....

- Terry ran 5 times around a 400 m track. What distance did he run? Give your answer first in metres, then change to kilometres.

.....

.....

- Yani counted his steps as he walked from his house to the dairy. He counted 800 steps. Yani's step length is 50 cm. How far is the dairy from Yani's house?

- Give your answer in cm. cm

- Change your answer to m. m

- Write your answer in km. km

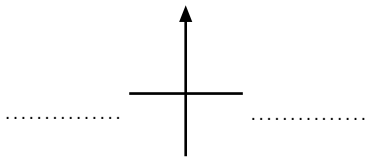
94 Compass Directions



Geometry

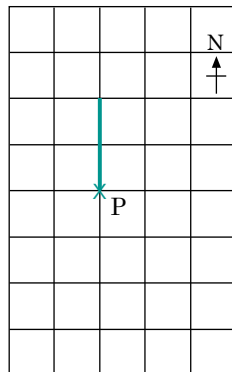
A Compass Directions

- 1
- North
- Fill in the three missing compass directions.



- 2 A walk starts at P. First go 2 squares north.

- a) Draw the rest of the walk :
Go 1 square west, then
4 squares south, then
3 squares east.



- b) Write the instructions to
get back to P using the
shortest route over the grid.

Walk squares

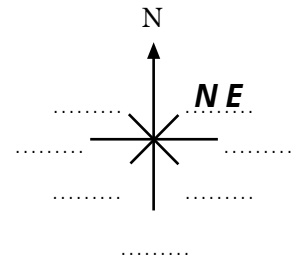
then squares

B North of Tokoroa

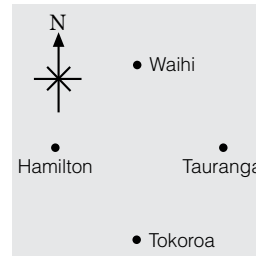
- 1a) What does NE mean?

.....

- b) Complete the compass
directions in the
diagram.



- 2



Complete these with a
compass direction.

For example :
Waihi is north of Tokoroa.

- a) Hamilton is of Tauranga.
b) Waihi is of Tauranga.
c) Tokoroa is of Waihi.
d) Hamilton is of Waihi.

C Pirate Island

- 1 Zoe and Beck sailed to Pirate Island
and tied their boat to the jetty. They explored
the island. Mark their journey in red.

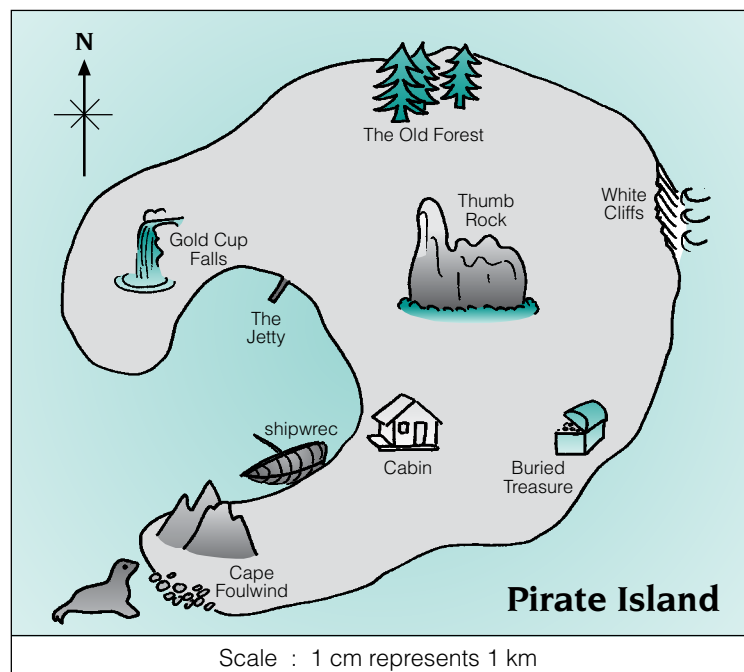
- a) First they walked 2 km in a northeasterly
direction.
b) Then they turned and walked east until
they reached the shore.
c) Then they walked in a straight line towards
the cabin. In what compass direction and
how far was that leg of the trip?

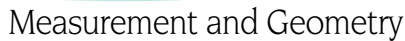
direction :

distance :

- 2 Decide where the two explorers should go
from the cabin. Describe their journey.

.....
.....





A Comparing Prices

-

Housebrand Still Spring Water

1.5 L,	\$0.89 ea
4 L,	\$3.00 ea
6 L,	\$4.99 ea
350 mL,	12 pack \$5.79
600 mL,	24 pack \$9.99

Working Space



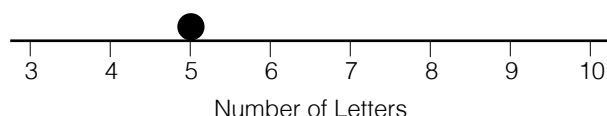
A Surnames

Chloe wants to investigate the number of letters in surnames. Here is a list of the surnames of all the pupils in Chloe's class.

Black	Gordon	Nieuwehuys
Boyes	Halt	Parker
Cheong	Hooper	Patel
Cox	Isaac	Roderick
Craven	Jarvis	Saunders
Donoghue	Keepa	Singh
Duggan	Kerr	Te Kaha
Dunn	Knowles	Tompson
Evans	Lake	Ward
Fitzgerald	McNally	Whaitiri

- Count the number of letters in each surname and record the result in the dot plot.
e.g. *Black* has 5 letters.

Length of Surnames



- Write the correct *numbers* in these comments.

- The shortest surname has letters, the longest has letters.
- The most common surname length is letters.
- Nobody in Chloe's class has a surname with letters.
- surnames have less than 6 letters.

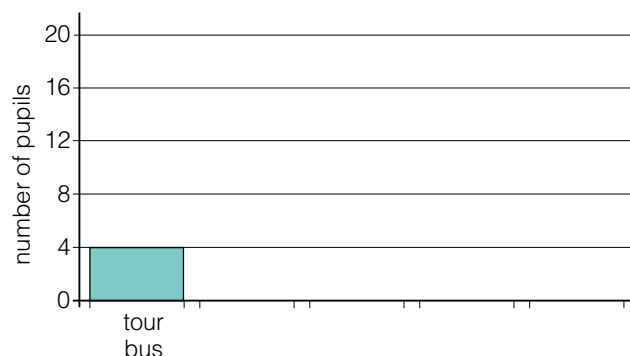
B Trains, Boats and Planes

Room 10 is doing a survey on travel. Pupils raise their hand if they have gone on a tour bus, a train, a plane, a ferry or a helicopter.

- How should the questions be worded? Choose A or B.
 (A) Have you ever *been* on a . . . ?
 (B) Have you ever *travelled* on a . . . ?
- This tally chart shows the result of their survey. Complete a bar chart for this data.

transport	tally
tour bus	
train	+++ +++ +++
plane	+++
inter-island ferry	+++ +++
helicopter	

Travel Survey of Room 10



- Where do you think Room 10 is more likely to be?
 (A) in Wellington or (B) in Queenstown.

Reason :

.....

- Do we know from the results how many pupils are in Room 10? Explain

.....

.....

.....

Page 4 - Mental + and -

- A1 a) 75 b) 54 c) 85 d) 101
e) 152 f) 363 g) 512 h) 1001
A2 a) 66 b) 77 c) 44 d) 57
e) 189 f) 238 g) 716 h) 492
A3 a) $84 + 6 + 23 = 113$ b) $145 + 5 + 31 = 181$
c) $328 + 2 + 53 = 383$ d) $360 + 40 + 130 = 530$
e) $680 + 20 + 520 = 1220$
B1 35 notes
B2 a) 23 b) 8 c) 31 tens, 310
d) 15 tens, 150
B3 a) 390 b) 640 c) 730 d) 530
e) 310 f) 160 g) 680 h) 880
B4 a) 395 b) 553 c) 318 d) 744
e) 247 f) 285 g) 443 h) 672

Page 5 - Making Adjustments

- A1 a) 21 b) 65 c) 31 d) 28
e) 47 f) 18 g) 41 h) 27
A2 \$24
A3 a) 42 b) 15 c) 39 d) 71
e) 58 f) 122 g) 105 h) 334
B1 a) 28, 28 b) 16, 16 c) 57, 57 d) 83, 83
B2 a) 19, 19 b) 81 c) 16 d) 29
e) 58 f) 106

Page 6 - Adding or Subtracting Too Much

- A1 a) $34 + 50 - 1 = 83$ b) $43 + 30 - 2 = 71$
c) $56 + 40 - 3 = 93$ d) $122 + 50 - 2 = 170$
e) $575 + 20 - 1 = 594$ f) 374
g) 491 h) 680
A2 a) $73 - 60 + 1 = 14$ b) $91 - 40 + 2 = 53$
c) $680 - 70 + 3 = 613$ d) $752 - 50 + 4 = 706$
e) $300 - 50 + 2 = 252$ f) 817
g) 628 h) 229
B1 a) $87 + 100 - 1 = 186$ b) $400 + 65 - 2 = 463$
c) $103 + 200 - 3 = 300$ d) $300 + 349 - 5 = 644$
e) $818 + 700 - 2 = 1516$
B2 a) $123 - 100 + 1 = 24$ b) $605 - 200 + 2 = 407$
c) $834 - 100 + 3 = 737$ d) $1000 - 800 + 4 = 204$
e) $2463 - 1000 + 2 = 1465$
B3 $450 - 200 + 2 = \$252$

Page 7 - Doubles and Triples

- A1 a) $140 + 140 - 2 + 1 = 280 - 1 = 279$
b) $320 + 320 + 3 - 1 = 640 + 2 = 642$
c) $100 + 100 - 3 - 2 = 200 - 5 = 195$
d) $250 + 250 - 3 + 4 = 500 + 1 = 501$
e) $30 + 30 + 30 + 2 - 1 + 3 = 90 + 4 = 94$
f) $50 + 50 + 50 + 4 - 2 + 1 = 150 + 3 = 153$
B1 a) $200 + 419 = 619$ b) $687 + 400 = 1087$
c) $400 + 457 = 857$ d) $422 + 10 = 432$
e) $700 - 69 = 631$ f) $500 + 236 = 736$
C1 $60 + 60 + 60 + 2 - 1 - 3 = 178$
C2 He pays $995 + 70 + 5 = 1070$
 $1280 - 1070 = 210$, \$210

Page 8 - More Strategies

- A1 a) 16 b) 32 c) 25 d) 81
e) 62 f) 28
A2 a) $715 + 195 = 910$ b) $353 + 267 = 620$
c) $241 + 589 = 830$
A3 a) 182 b) 357 c) 936 d) 749
e) 815 f) 573
B1 a) $79 + 200 = 279$ b) $7 + 100 = 107$
c) $36 + 100 = 136$ d) $1 + 500 = 501$
e) $69 + 200 = 269$ f) $77 + 500 = 577$
B2 a) $2 + 400 + 20 = 422$ b) $15 + 300 + 50 = 365$
c) $74 + 200 + 10 = 284$ d) $37 + 400 + 30 = 467$
B3 Top level : 34 Second layer : 168, 202
Third layer : 484, 316, 114

Page 9 - Read and Solve

- A1 42 A2 \$330
A3 \$29 A4 \$15
A5 675 A6 862
A7 428 A8 152
A9 284 A10 \$155
B1 82 years old or 26 years old B2 \$428
B3 Numbers top left - clockwise
157, 400, 243, 282, 39, 537, 498, 655
C1 $320 + 320 - 3 + 4 = 641$ km
C2 $36 + 200 + 20 = 256$ km
C3 Jodi - 110 km, Ravi - 90 km

Page 10 - Counting

- A1 a) 3761 b) 5301 c) 3759 d) 5299
A2 a) 460 b) 9810 c) 440 d) 9790
A3 a) 1700 b) 7100 c) 1500 d) 6900
A4 a) ninety-nine thousand b) one hundred thousand
A5 a) 7995 b) 8085 c) 8985 d) 17 985
A6 a) 8413, 8174, 1024, 975, 579
b) 3960, 3906, 3609, 3096, 3069
B1 a) 139 b) 13 B2 a) 50 b) 500
B3 a) 2 b) 0 c) 1 d) 7
B4 a) 25 b) 6 c) 10 d) 78
B5 a) 250 b) 64 c) 104 d) 789

Page 11 - Place Values 1

- A1 a) ninety thousand, two hundred and sixty.
b) three hundred and twenty-one thousand and six.
A2 a) eight hundred b) eight hundred thousand
c) eight thousand
A3 a) 2084 b) 54 360 c) 295 000
A4 one million (1 000 000)
B1 a) < b) > c) < d) <
e) > f) >
B2 a) Stewart Island b) Chatham Island
c) twenty eight thousand and five hundred
B3 The Southland region has 60 000 more people.

Page 12 - Place Values 2

- A1 a) 100 b) 452
A2 a) 100 b) 1000 c) 3400
A3 a) 708 b) 70
B1 a) 26 643 b) 71 602 c) 37 744 d) 925
e) 10 000 f) 10 g) 800 051 h) 809 051
i) 889 808 j) 989 798 k) 1 l) 100

Page 13 - Rounding

- A1 a) any number between 136 - 139
b) 601 - 649 c) 5281 - 5284
d) 17501 - 17 999
A2 a) 350 b) 900 c) 1870 d) 1000
e) 32 000
A3 a) 950 and 960; closer to 950
b) 900 and 1000; closer to 1000
c) 2470 and 2480; closer to 2480
d) 2400 and 2500; closer to 2500
e) 2000 and 3000; closer to 2000
f) 48000 and 49000; closer to 49000
B1 a) 80 b) 140 c) 250 d) 740
e) 1290 f) 4270
B2 a) 300 b) 800 c) 1300 d) 4300
e) 7700 f) 24 500
B3 a) 1000 b) 4000 c) 8000 d) 24 000
e) 64 000 f) 146 000
B4 a) 5400 km b) 12 000 km

Page 14 - Large Numbers + and -

- A1 a) 7350 b) 4750 c) 4390 d) 7870
e) 6470 f) 5890 g) 13 480 h) 9980
i) 9510 j) 8349 k) 4049 l) 3429
A2 a) 2720 b) 6120 c) 6700 d) 1740
e) 7540 f) 7690 g) 330 h) 1930
i) 2240 j) 8009 k) 8209 l) 8969
B1 Across : 1 - 1644, 6 - 2075, 8 - 3918, 10 - 39
12 - 516, 13 - 740, 14 - 85, 15 - 6050, 16 - 7840
18 - 2163.
Down : 2 - 6216, 3 - 408, 4 - 47, 5 - 4358, 7 - 5345
9 - 9157, 11 - 9000, 13 - 7006, 15 - 641, 17 - 82

Page 15 - Pen and Paper Adding

- A1 a)
$$\begin{array}{r} 625 \\ 348 \\ \hline 973 \end{array}$$
 $600 + 20 + 5$
$$\begin{array}{r} 300 + 40 + 8 \\ \hline 900 + 60 + 13 \end{array}$$

b)
$$\begin{array}{r} 781 \\ 293 \\ \hline 1074 \end{array}$$
 $700 + 80 + 1$
$$\begin{array}{r} 200 + 90 + 3 \\ \hline 900 + 170 + 4 \end{array}$$

c)
$$\begin{array}{r} 574 \\ 883 \\ \hline 1457 \end{array}$$
 $500 + 70 + 4$
$$\begin{array}{r} 800 + 80 + 3 \\ \hline 1300 + 150 + 7 \end{array}$$

d)
$$\begin{array}{r} 4217 \\ 2643 \\ \hline 6860 \end{array}$$
 $4000 + 200 + 10 + 7$
$$\begin{array}{r} 2000 + 600 + 40 + 3 \\ \hline 6000 + 800 + 50 + 10 \end{array}$$

e)
$$\begin{array}{r} 3065 \\ 2864 \\ \hline 5929 \end{array}$$
 $3000 + 60 + 5$
$$\begin{array}{r} 2000 + 800 + 60 + 4 \\ \hline 5000 + 800 + 120 + 9 \end{array}$$

f)
$$\begin{array}{r} 6918 \\ 1494 \\ \hline 8412 \end{array}$$
 $6000 + 900 + 10 + 8$
$$\begin{array}{r} 1000 + 400 + 90 + 4 \\ \hline 7000 + 1300 + 100 + 12 \end{array}$$

B1 a) 694 b) 791 c) 658 d) 928
e) 641 f) 1484
B2 a) 7865 b) 9095 c) 9415 d) 11 950
e) 14 344 f) 4650
B3 a) 1220 b) 10 386

Page 16 - Pen and Paper Subtracting

- A1 a)
$$\begin{array}{r} 91 \\ 500 \\ \hline 1000 \end{array}$$
 b)
$$\begin{array}{r} 16 \\ 600 \\ \hline 3000 \end{array}$$
 c)
$$\begin{array}{r} 28 \\ 900 \\ \hline 5000 \end{array}$$

$$\begin{array}{r} 1591 \\ 3616 \\ \hline 5207 \end{array}$$

A2 a)
$$\begin{array}{r} 72 \\ 1000 \\ \hline 850 \end{array}$$
 b)
$$\begin{array}{r} 30 \\ 600 \\ \hline 3000 \end{array}$$
 c)
$$\begin{array}{r} 51 \\ 500 \\ \hline 2000 \end{array}$$

$$\begin{array}{r} 1922 \\ 508 \\ \hline 4138 \end{array}$$
 $500 + 20 + 8$
$$\begin{array}{r} 200 + 50 + 1 \\ \hline 300 + 70 + 7 \end{array}$$

B1 a)
$$\begin{array}{r} 792 \\ -467 \\ \hline 325 \end{array}$$
 $700 + 90 + 2$
$$\begin{array}{r} 400 + 60 + 7 \\ \hline 300 + 20 + 5 \end{array}$$

b)
$$\begin{array}{r} 628 \\ -251 \\ \hline 377 \end{array}$$
 $600 + 20 + 8$
$$\begin{array}{r} 200 + 50 + 1 \\ \hline 300 + 70 + 7 \end{array}$$

c)
$$\begin{array}{r} 744 \\ -186 \\ \hline 558 \end{array}$$
 $700 + 40 + 4$
$$\begin{array}{r} 100 + 80 + 6 \\ \hline 500 + 50 + 8 \end{array}$$

d)
$$\begin{array}{r} 407 \\ -235 \\ \hline 172 \end{array}$$
 $400 + 7 + 7$
$$\begin{array}{r} 200 + 30 + 5 \\ \hline 100 + 70 + 2 \end{array}$$

e)
$$\begin{array}{r} 3528 \\ -1709 \\ \hline 1819 \end{array}$$
 $3000 + 500 + 20 + 8$
$$\begin{array}{r} 1000 + 700 + 9 \\ \hline 1000 + 800 + 10 + 9 \end{array}$$

