

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



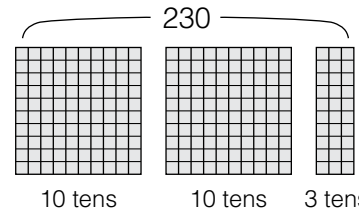
B Up or Down in Tens

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) $762 - 90 = \dots\dots\dots$

22 Tens, Hundred and Thousands



Multiplying and Dividing

A Lots of Zeros

1 Write as a number.

- a) 6 tens = **60**
- b) 14 tens =
- c) 25 hundreds =
- d) 40 hundreds =
- e) 16 thousands =



2 Calculate.

- a) 45×10 =
- b) 12×1000 =
- c) 90×10 =
- d) 600×100 =
- e) 850×10 =

3a) What is less, 4 thousands or 42 hundreds?
.....

b) What is more, 180 tens or 2 thousands?
.....

4a) *Sixty tens is the same as six hundreds.*

Is this right?

b) Finish this sentence : *Six hundred tens is the same as*

c) Fifty hundreds is the same as

d) Four hundred hundreds is the same as

e) Three thousand thousands is the same as

B How Many?

- 1a) How many tens make 200? **20**
- b) How many tens make 350?
- c) How many tens make 700?
- d) How many hundreds make 1800?
- e) How many hundreds make 40 000?
- f) How many thousands make 560 000?

2 Calculate.

- a) $50 \div 10$ =
- b) $700 \div 100$ =
- c) $450 \div 10$ =
- d) $8000 \div 100$ =
- e) $96\ 000 \div 100$ =
- f) $730\ 000 \div 1000$ =

3a) Donald says, "*Multiplying by 100 is the same as multiplying by 10, and again by 10.*" Is this right?
.....

b) Finish this sentence : *Dividing by 100 is the same as*

4a) How many thousands in one million?

b) How many thousands in half a million?

5 First prize in a lotto game is three and a half million dollars.

a) Write this amount in figures.
.....

b) How many bundles of \$1000 in this prize?
.....



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 :

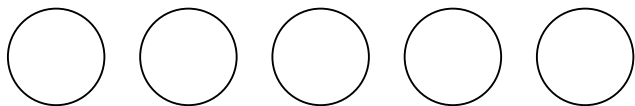
We can give each friend one whole pie then we cut the remaining two pies into five equal pieces.

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

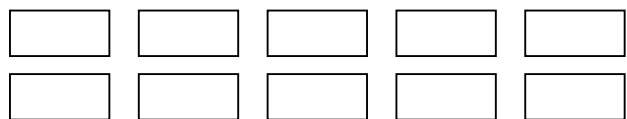
either $\frac{1}{5}$ of 7 = $1\frac{2}{5}$ or $7 \div 5 = 1\frac{2}{5}$

- 1 Five pies are shared equally between 4 friends.



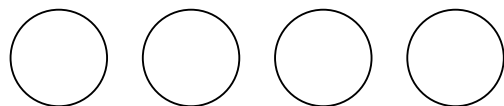
- a) Divide the pies. Colour one share red.
b) Complete : $\frac{1}{4}$ of 5 = ; $5 \div 4 =$

- 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.

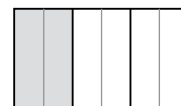
- a) $\frac{2}{3}$ of \$20.70
b) $\frac{3}{8}$ of 1344 kilometres

- 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?

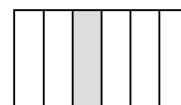
.....

- 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.

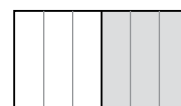
- a) What fraction of the slab did I get?



- 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

A Estimating and Calculating

1 Mark went out to buy remote control Hot Wheels. The list shows what he bought.



item	price	estimate
Hot Wheels Car	\$ 242.00	.....
Ramp	\$ 9.75	.....
Batteries	\$ 20.50	.....
Charger	\$ 45.95	.....
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 :

64 Follow Instructions



Algebra

A Rules for Chains

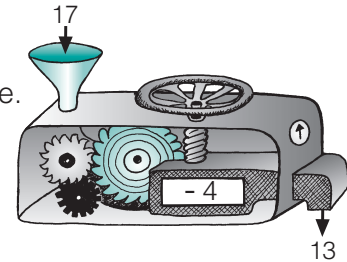
- Write down the first five numbers of the number chains with the following rules :
 - Each number is 7 more than the previous. The first number is 4.
.....,,,,
 - The first number is 5. Each following number is 3 less. You will need to use negative numbers.
.....,,,,
 - Each number is half of the previous number. The first number is 84.
.....,,,,
- Adam starts his fitness training by running 750 m. Every week he increases the distance by 250 m. What distances will Adam be running in each of the first four weeks of his training?
.....,,,,

C Real Rules

- The amount of time a leg of mutton needs to be cooked in the oven is found with this rule : 25 minutes for every 0.5 kg of mutton. Write the cooking time under each weight in the table.
- The cost of a few hours of horse-trekking is \$55 per hour, plus \$15 scrub-down fee per trek. Write in the table, the cost for treks of various times.
- A motel charges \$150 for a single person, \$180 for a couple, then \$25 for each additional person, up to a maximum of 4 people. Complete the table.
- A shop has a special deal for T-shirts, maximum 4 per customer. The first T-shirt has the normal price of \$24. A second T-shirt is half the normal price; a third T-shirt is $\frac{1}{3}$ of the normal price; a fourth T-shirt is $\frac{1}{4}$ the normal price. Fill in the table showing the total cost of a purchase.

B The Number Cruncher

A *Number Cruncher* changes numbers using a displayed rule. This one subtracts 4 from any number going in.



- Write down the number that will come out if the machine is set to these rules :
 - | | | | | |
|----|---|-----|---|----------|
| 17 | → | - 4 | → | ...13... |
| 20 | → | - 4 | → | ..... |
| 1 | → | - 4 | → | ..... |
 - | | | | | |
|----|---|-----|---|-------|
| 21 | → | ÷ 3 | → | ..... |
| 39 | → | ÷ 3 | → | ..... |
| 81 | → | ÷ 3 | → | ..... |
- Calculate the outcomes using these double rules.
 - | | | | | |
|----|---|-----------------------------|---|----------|
| 7 | → | first
+ 2
then
x 5 | → | ...45... |
| 10 | → | first
+ 2
then
x 5 | → | |
| 18 | → | first
+ 2
then
x 5 | → | |
 - | | | | | |
|----|---|-----------------------------|---|-------|
| 30 | → | first
- 6
then
÷ 4 | → | |
| 54 | → | first
- 6
then
÷ 4 | → | |
| 86 | → | first
- 6
then
÷ 4 | → | |

weight of mutton (kg)	0.5	1	1.5	2
cooking time (min)				

length of trek (hours)	1	2	3	4
cost (\$)				

number of people	1	2	3	4
cost (\$)				

number bought	1	2	3	4
total cost (\$)				

78 Units of Measurement



Measurement

When you measure something you write down a number and a **unit**.

Kilometres, metres, centimetres and **millimetres** (km, m, cm, mm) are units for measuring **lengths**.

Kilograms and **grams** (kg, g) are units for measuring **weights**.

Litres and **millilitres** (L, mL) are units for measuring **volumes** of water or other liquids.

Degrees Celsius ($^{\circ}\text{C}$) is a unit for measuring **temperatures**.

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ m} = 100 \text{ cm}$$

$$1 \text{ cm} = 10 \text{ mm}$$

$$1 \text{ kg} = 1000 \text{ g}$$

$$1 \text{ L} = 1000 \text{ mL}$$

A Choosing Units

1 Choose a unit from the box to fill the gaps.

kg	g	L	mL
km	m	cm	mm
			$^{\circ}\text{C}$

- The length of Amy's pencil case is 22
- Mum bought 2.5 of potatoes at the farmers' market.
- Dad added 20 of cream to the tomato soup.
- The temperature dropped by 2 in one hour.
- This Dragon Maths book is 9 thick.
- A banana weighs about 150
- The baby bath contained 10 of water.
- The dairy is just 300 down the road.

B Changing Units

1 Fill in the number.

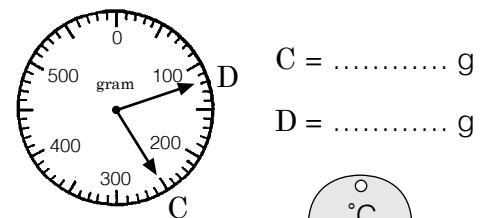
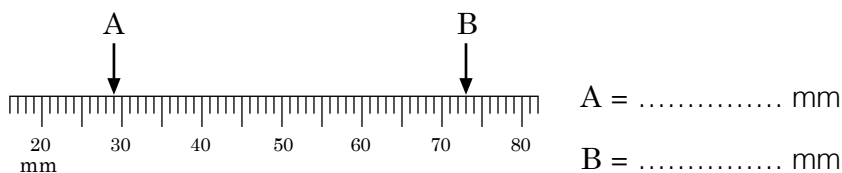
- $7 \text{ km} = \dots\dots\dots \text{ m}$
- $\frac{1}{2} \text{ km} = \dots\dots\dots \text{ m}$
- $4 \text{ m} = \dots\dots\dots \text{ cm}$
- $\frac{1}{4} \text{ m} = \dots\dots\dots \text{ cm}$
- $3\frac{1}{2} \text{ m} = \dots\dots\dots \text{ cm}$
- $600 \text{ cm} = \dots\dots\dots \text{ m}$
- $\frac{1}{2} \text{ cm} = \dots\dots\dots \text{ mm}$
- $12 \text{ cm} = \dots\dots\dots \text{ mm}$
- $50 \text{ mm} = \dots\dots\dots \text{ cm}$

- $3 \text{ L} = \dots\dots\dots \text{ mL}$
- $8000 \text{ mL} = \dots\dots\dots \text{ L}$
- $\frac{1}{4} \text{ L} = \dots\dots\dots \text{ mL}$
- $4500 \text{ mL} = \dots\dots\dots \text{ L}$

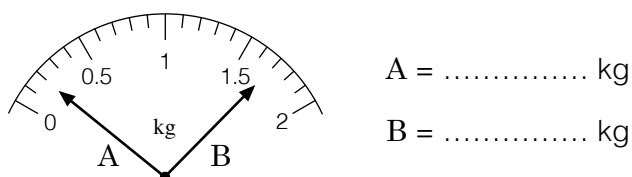
- $2000 \text{ g} = \dots\dots\dots \text{ kg}$
- $\frac{3}{4} \text{ kg} = \dots\dots\dots \text{ g}$
- $1\frac{1}{4} \text{ kg} = \dots\dots\dots \text{ g}$
- $3500 \text{ g} = \dots\dots\dots \text{ kg}$

C Reading Scales

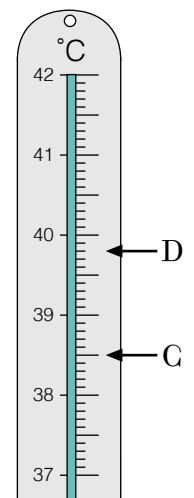
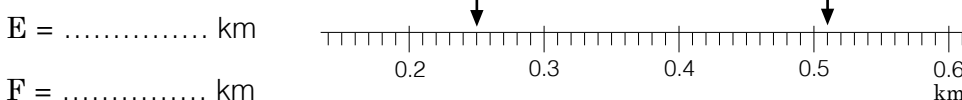
1 Read off the number at each of these pointers.



2 Read off the decimal numbers at each of these pointers.



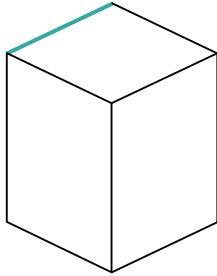
C = $^{\circ}\text{C}$
D = $^{\circ}\text{C}$





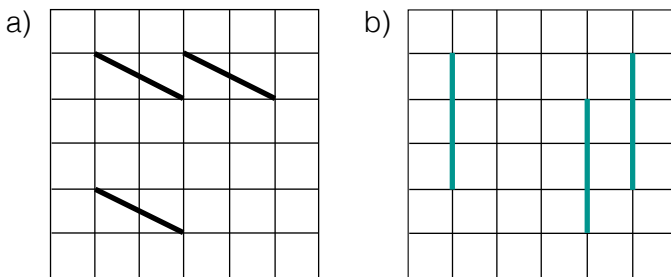
A Drawing Cuboids

1 This diagram of a cuboid has one green edge.

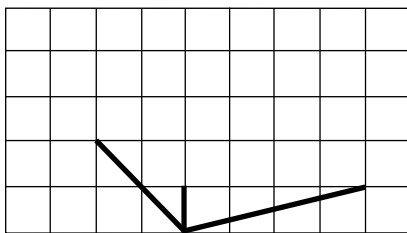


- a) Colour green two edges which are parallel to that edge.
- b) Colour red 3 other edges which are all parallel.

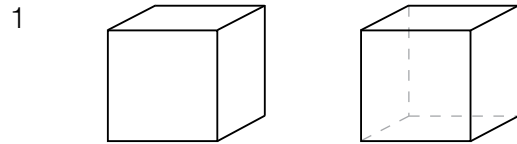
2 When Olivia draws a cuboid she always starts with 3 parallel lines of equal length. Finish Olivia's drawings of the cuboids.



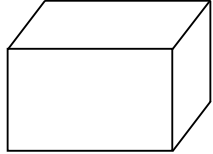
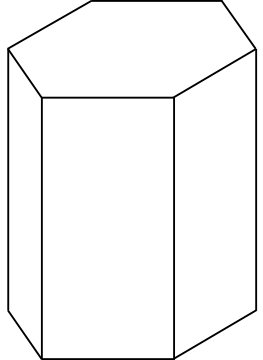
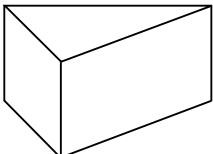
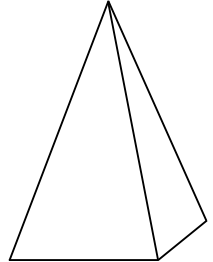
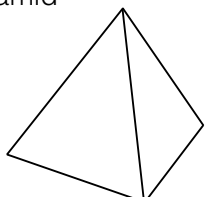
3 Finish this picture of a pizza box.



B See-through Solids



We can make a cube see-through by drawing the invisible edges with dotted lines. Draw with dotted lines the invisible edges in these solids.

- a) cuboid 
- b) hexagonal prism 
- c) triangular prism 
- d) square based pyramid 
- e) triangle based pyramid 

C Features in Solids

1 Here is a list with five features. Check with the solids drawn in **B** to see whether they have these features. Write *yes* or *no*.

feature ↓	shape →	cuboid	hexagonal prism	triangular prism	square based pyramid	triangle based pyramid
a) It has some rectangular or square faces		yes				
b) It has some triangular faces			no			
c) It has an even number of faces						
d) It has an even number of edges						
e) It has an even number of vertices						



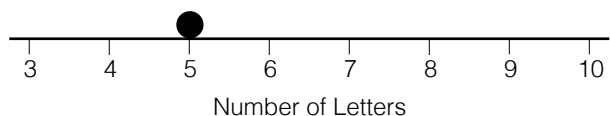
A Surnames

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.

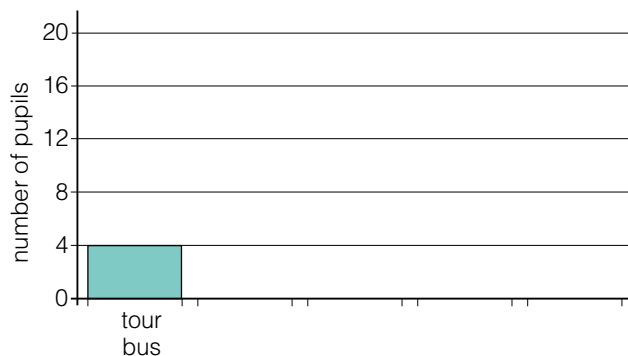
B Trains, Boats and Planes

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.
 - Have you ever *been* on a . . . ?
 - 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?
 - in Wellington or
 - in Queenstown.

Reason :

.....

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

.....

.....

.....

Pages 4 - 16 Adding and Subtracting

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 Northland region has 91 000 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)
$$\begin{array}{r} 625 \\ 348 \\ \hline 973 \end{array}$$

$$\begin{array}{r} 900 + 40 + 8 \\ 973 \\ \hline 900 + 60 + 13 \\ 973 \end{array}$$

$$\begin{array}{r} 781 \\ 293 \\ \hline 1074 \end{array}$$

$$\begin{array}{r} 700 + 80 + 1 \\ 293 \\ \hline 990 + 170 + 4 \\ 1160 \end{array}$$

$$\begin{array}{r} 574 \\ 883 \\ \hline 1457 \end{array}$$

$$\begin{array}{r} 500 + 70 + 4 \\ 883 \\ \hline 1300 + 150 + 7 \\ 1457 \end{array}$$

$$\begin{array}{r} 4217 \\ 2643 \\ \hline 6860 \end{array}$$

$$\begin{array}{r} 4000 + 200 + 10 + 7 \\ 2643 \\ \hline 6000 + 800 + 50 + 10 \\ 6860 \end{array}$$

$$\begin{array}{r} 3065 \\ 2864 \\ \hline 5929 \end{array}$$

$$\begin{array}{r} 3000 + 60 + 5 \\ 2864 \\ \hline 5000 + 800 + 120 + 9 \\ 5929 \end{array}$$

$$\begin{array}{r} 6918 \\ 1494 \\ \hline 8412 \end{array}$$

$$\begin{array}{r} 6000 + 900 + 10 + 8 \\ 1494 \\ \hline 7000 + 1300 + 100 + 12 \\ 8412 \end{array}$$
- 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)
$$\begin{array}{r} 91 \\ 500 \\ \hline 1000 \\ 1591 \end{array}$$

$$\begin{array}{r} 16 \\ 600 \\ \hline 3000 \\ 3616 \end{array}$$

$$\begin{array}{r} 28 \\ 900 \\ \hline 5000 \\ 5928 \end{array}$$
- A2 a)
$$\begin{array}{r} 72 \\ 1000 \\ \hline 850 \\ 1922 \end{array}$$

$$\begin{array}{r} 30 \\ 600 \\ \hline 3000 \\ 3060 \end{array}$$

$$\begin{array}{r} 51 \\ 500 \\ \hline 2000 \\ 2501 \end{array}$$

$$\begin{array}{r} 508 \\ 4138 \\ \hline 4646 \end{array}$$

$$\begin{array}{r} 231 \\ 2782 \end{array}$$
- B1 a)
$$\begin{array}{r} 792 \\ -467 \\ \hline 325 \end{array}$$

$$\begin{array}{r} 700 + 90 + 2 \\ 400 + 60 + 7 \\ \hline 300 + 20 + 5 \\ 325 \end{array}$$

$$\begin{array}{r} 628 \\ -251 \\ \hline 377 \end{array}$$

$$\begin{array}{r} 500 + 120 + 8 \\ 200 + 50 + 1 \\ \hline 300 + 70 + 7 \\ 377 \end{array}$$

$$\begin{array}{r} 744 \\ -186 \\ \hline 558 \end{array}$$

$$\begin{array}{r} 600 + 130 + 14 \\ 100 + 80 + 6 \\ 500 + 50 + 8 \\ \hline 100 + 70 + 2 \\ 558 \end{array}$$

$$\begin{array}{r} 407 \\ -235 \\ \hline 172 \end{array}$$

$$\begin{array}{r} 300 + 100 + 8 \\ 200 + 30 + 5 \\ \hline 100 + 70 + 2 \\ 172 \end{array}$$

$$\begin{array}{r} 3528 \\ -1709 \\ \hline 1819 \end{array}$$

$$\begin{array}{r} 2000 + 1500 + 10 + 18 \\ 1000 + 700 + 0 + 9 \\ \hline 1000 + 800 + 10 + 9 \\ 1819 \end{array}$$

