Mathletics

Series F Student

# Addition and Subtraction

My name

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First edition printed 2009 in Australia.

A catalogue record for this book is available from 3P Learning Ltd.

**ISBN** 978-1-921860-77-5

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# Series F – Addition and Subtraction

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Nicola Herringer



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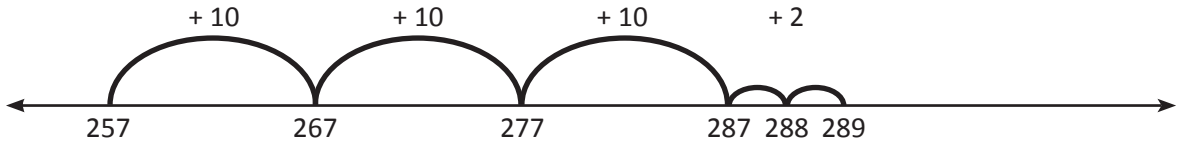
# Addition mental strategies – jump strategy

When we add we can use the jump strategy to help us. Look at 257 + 32:

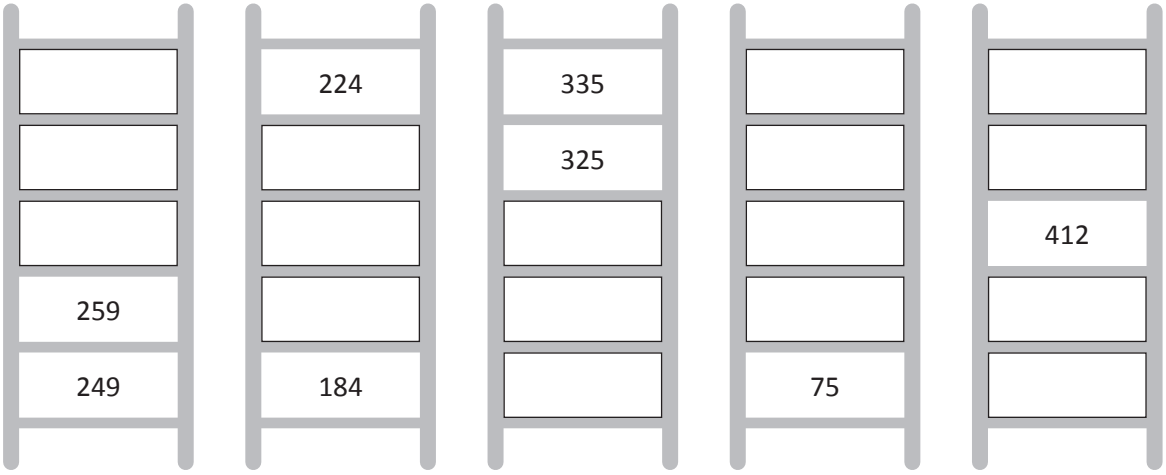
**1** First we jump up by the tens

**2** Then we jump up by the units



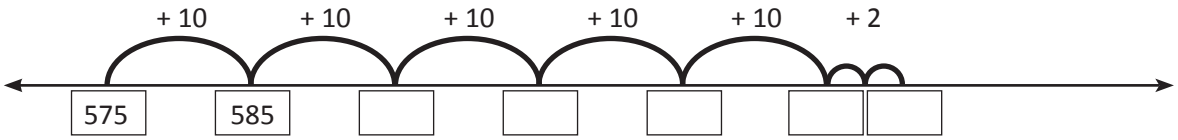

**257 + 32 = 289**

**1** **Warm up with jumping by tens up and down these ladders:**



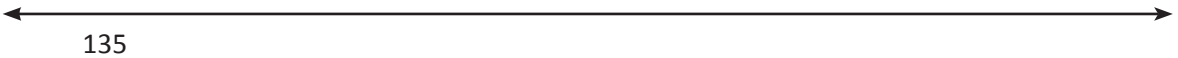

**2** **Use the jump strategy to complete these additions:**

**a** 575 + 52 = ☐




**b** 759 + 41 = ☐

**c** 135 + 73 = ☐



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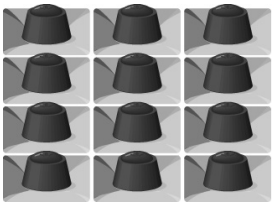
# Addition mental strategies – jump strategy

**3** **A group of friends each bought a bag of mixed lollies at a lolly bar. Practise using the jump strategy to solve each problem. Write your answer and any working out in the space below each problem:**



Choc mints
90¢ per scoop

Jellybeans
55¢ per scoop

Cream chocs
95¢ per scoop

Jubes
75¢ per scoop

**a** How much did Liam spend if he bought a scoop of jellybeans and a scoop of choc mints?

**b** How much did Ruby spend if she bought a scoop of cream chocs and a scoop of jubes?

**c** How much did Rea spend if she bought one scoop of each type?

**d** Rachel spent $1.85 on 2 scoops of lollies. Use guess, check and improve to work out which 2 scoops she could have bought.

**4** **Use the jump strategy to help you finish these addition walls. Can you see how they work?**

**a**

| | | |
|---|---|---|
| | 51 | 35 |
| 41 | 10 | 25 |

**b**

| | | |
|---|---|---|
| | | 60 |
| 32 | 40 | 20 |

**c**

| | | |
|---|---|---|
| | | |
| 15 | 60 | 13 |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# Addition mental strategies – split strategy

When adding large numbers in our heads it can be easier to split one of the numbers into parts and add each part separately.

214 + 138 → 100, 30, 8 → 214 + 100 = 314 → 314 + 30 = 344 → 344 + 8 = 352

**214 + 138 = 352**

**1** **Use the split strategy to add the numbers. The first one has been done for you.**

**a** 623 + 28 → 20, 8

623 + 20 = 643

643 + 8 = 651

623 + 28 = 651

**b** 38 + 26 → _____, _____

_____

_____

38 + 26 = _____

**c** 156 + 142 → _____, _____, _____

_____

_____

_____

156 + 142 = _____

**2** **These problems have been split and some have been solved already. Lucky, hey? You just have to work out what the second numbers were before they were split and answer any unsolved problems:**

**a** 416 + 90 + 1 = 507

was

416 + 91

**b** 230 + 30 + 3 = _____

was

230 + _____

**c** 283 + 60 + 7 = _____

was

283 + _____

**d** 532 + 60 + 1 = _____

was

532 + _____

**e** 425 + 100 + 40 + 2 = _____

was

425 + _____

**f** 129 + 200 + 40 + 6 = _____

was

129 + _____

**3** **Work out the answers to these questions by using the split strategy. See if you can do the working in your head. If it helps, make notes as you go:**

**a** 173 + 36 = _____

**b** 446 + 51 = _____

**c** 112 + 83 = _____

**d** 724 + 72 = _____

**e** 475 + 122 = _____

**f** 123 + 164 = _____


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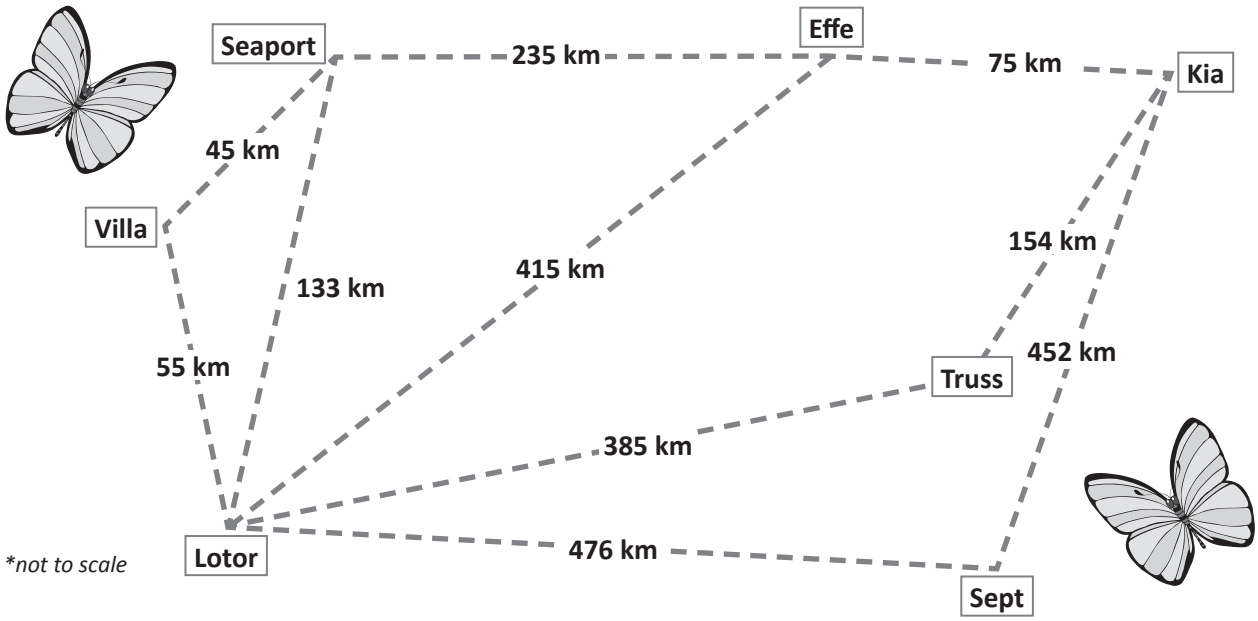
# Addition mental strategies – split strategy

**4** **Butterflies can fly great distances. Use the map and the split strategy to calculate the total distance flown by each butterfly in the table below:**




| Flight Path | Distances to add | Total distance |
|---|---|---|
| The Field Crescent flies from Lotor to Villa and then to Seaport | 55 + 45 | |
| The Painted Lady flies from Sept to Lotor and then to Villa | | |
| The Fawn flies from Seaport to Effe and then to Kia | | |
| The Monarch flies from Sept to Kia and then to Effe | | |

We often use the split strategy when adding money. We split the amounts into dollars and cents, work out each part and then add the two answers together:

$$\$28.50 + \$16.80 = (\$28 + \$16) + (\$0.50 + \$0.80)$$
$$= \$44 + \$1.30$$
$$= \$45.30$$

**5** **Match the price tags with the bills:**

$18.25 + $12.75

Total: $31

$64.70 + $11.30

Total: $46

Total: $76

$11.85 + $34.15

Total: $130

$56.35 + $73.65



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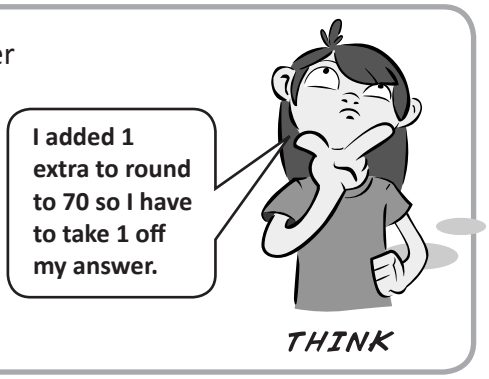
# Addition mental strategies – compensation strategy

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

405 + 69 = 474

405 + 70 (– 1) *I rounded up by 1*

475 (– 1) = 474 *so I subtract 1.*




**1** **Warm up by rounding these numbers to the closest ten:**

**a** 48 _____ **b** 67 _____ **c** 232 _____ **d** 74 _____

**e** 89 _____ **f** 456 _____ **g** 955 _____ **h** 786 _____

**2** **Solve these problems using compensation:**

**a** 45 + 37 = ☐

45 + 40 ◯

_____ ◯ = _____

**b** 66 + 18 = ☐

66 + _____ ◯

_____ ◯ = _____

**c** 86 + 49 = ☐

86 + _____ ◯

_____ ◯ = _____

**d** 124 + 57 = ☐

124 + _____ ◯

_____ ◯ = _____

We can also round down to the closest ten. When we do this we add to compensate.

**3** **Round these numbers to the closest ten. Then compensate by adding:**

**a** 26 + 42 = ☐

26 + 40 ◯

_____ ◯ = _____

**b** 35 + 63 = ☐

35 + _____ ◯

_____ ◯ = _____

**c** 96 + 21 = ☐

96 + _____ ◯

_____ ◯ = _____

**d** 145 + 34 = ☐

145 + _____ ◯

_____ ◯ = _____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# Addition mental strategies – compensation strategy

**4** **Connect the statements with their answer:**

When we round down we compensate by ____ subtracting

When we round up we compensate by ____ adding

**5** **Solve these addition problems using compensation. Decide if you need to round up or down and compensate accordingly. Make as many notes as you need to:**

**a** 425 + 67

**b** 673 + 98

**c** 275 + 91

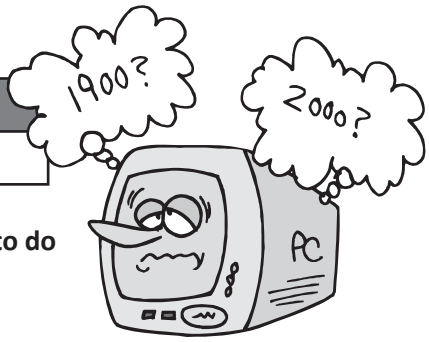
**d** 784 + 32

**e** 316 + 73

**f** 115 + 79

**6** **A website tracked the number of visitors over 5 days:**

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|
| 124 | 199 | 213 | 158 | 236 |




**Use the compensation method to answer the following questions. Try to do the sum in your head, then show how you did it in the space below:**

**a** How many people looked at the website on Monday and Tuesday?

**b** How many people looked at the website on Thursday and Friday?

**c** On which 2 days did the total reach 449 visitors?



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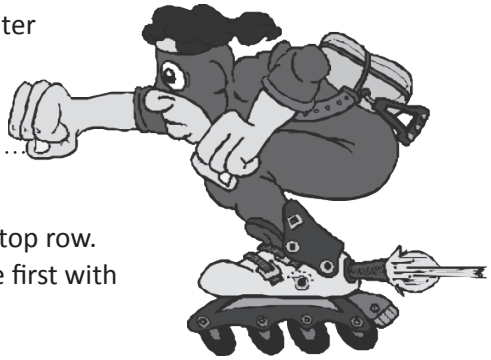
# Checkerboard race

apply

**Getting ready**

This is a game for 2 players. You will need a counter each, a die and some paper to keep score.



**What to do**

Each of you will choose a starting square on the top row. The object of this game is to get to the finish line first with the largest total.

Roll a die. If you throw:

- a 1 or 2, you can only move one square across the row in either direction;
- a 3 or 4 means you can move one square diagonally;
- a 5 or 6 means you move one downwards.

Add the two numbers using a strategy of your choice. Record your total as you go. Who will arrive at the finish with the largest score? Good luck!

THINK

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 81 | 76 | 93 | 42 | 89 | 50 | 66 | 74 |
| 62 | 28 | 54 | 37 | 63 | 45 | 95 | 39 |
| 87 | 70 | 69 | 83 | 75 | 57 | 12 | 49 |
| 63 | 93 | 52 | 44 | 86 | 67 | 37 | 58 |
| 38 | 47 | 83 | 17 | 95 | 72 | 49 | 56 |
| 90 | 73 | 68 | 39 | 54 | 23 | 85 | 43 |
| 41 | 36 | 51 | 91 | 78 | 66 | 17 | 32 |
| 63 | 81 | 27 | 11 | 44 | 46 | 50 | 74 |
| FINISH | | | | | | | |

DISCOVER



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# Crack the city code

apply

**Getting ready**

Work out the answers to these sums in your head. Each answer matches a letter in the list on the right. Write the letters next to your answers, then unjumble the letters to find the name of a city.

**What to do**

Try competing with a friend to be the fastest to do all of the sums and work out the names of the three cities.

**a**

| | | | |
|---|---|---|---|
| 701 + 126 = | | Letter | |
| 501 + 81 = | | Letter | |
| 810 + 117 = | | Letter | |
| 304 + 205 = | | Letter | |
| 810 + 17 = | | Letter | |
| 230 + 626 = | | Letter | |

The city is _____

**b**

| | | | |
|---|---|---|---|
| 293 + 216 = | | Letter | |
| 811 + 111 = | | Letter | |
| 650 + 130 = | | Letter | |
| 610 + 57 = | | Letter | |
| 380 + 32 = | | Letter | |

The city is _____

**c**

| | | | |
|---|---|---|---|
| 816 + 40 = | | Letter | |
| 913 + 62 = | | Letter | |
| 751 + 105 = | | Letter | |
| 830 + 79 = | | Letter | |
| 882 + 93 = | | Letter | |
| 471 + 111 = | | Letter | |

The city is _____

| Code |
|---|
| A = 922 |
| B = 754 |
| C = 141 |
| D = 582 |
| E = 927 |
| F = 735 |
| G = 222 |
| H = 358 |
| I = 780 |
| J = 989 |
| K = 481 |
| L = 909 |
| M = 398 |
| N = 856 |
| O = 975 |
| P = 667 |
| Q = 555 |
| R = 412 |
| S = 509 |
| T = 538 |
| U = 656 |
| V = 1 110 |
| W = 1 150 |
| X = 716 |
| Y = 827 |
| Z = 1 907 |



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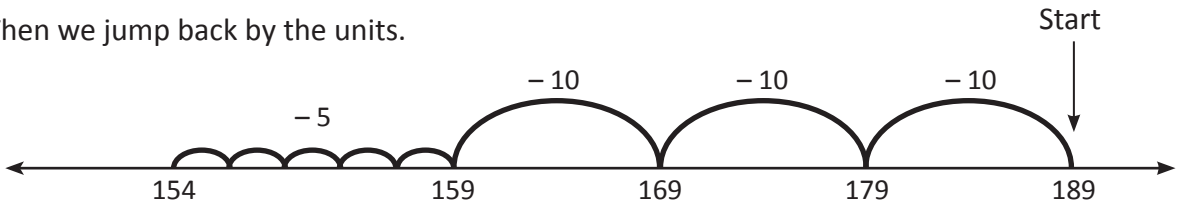
# Subtraction mental strategies – jump strategy

When we subtract we can use the jump strategy to help us. Look at 189 – 35:

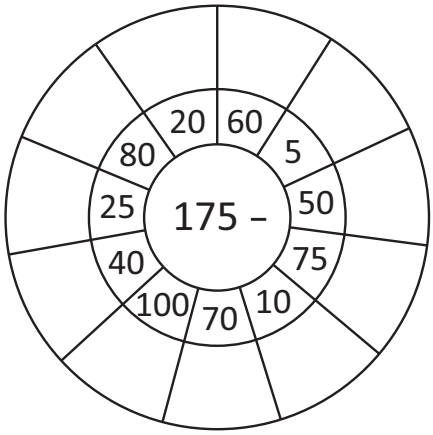
**1** First we jump back by the tens.

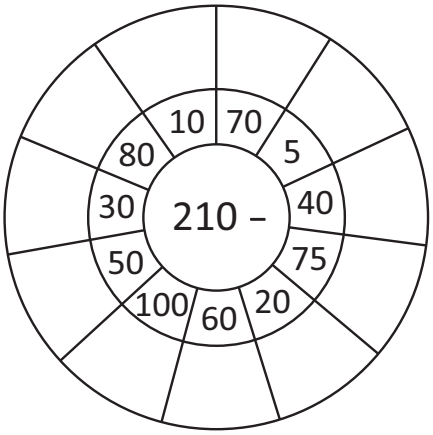
**2** Then we jump back by the units.




**189 – 35 = 154**

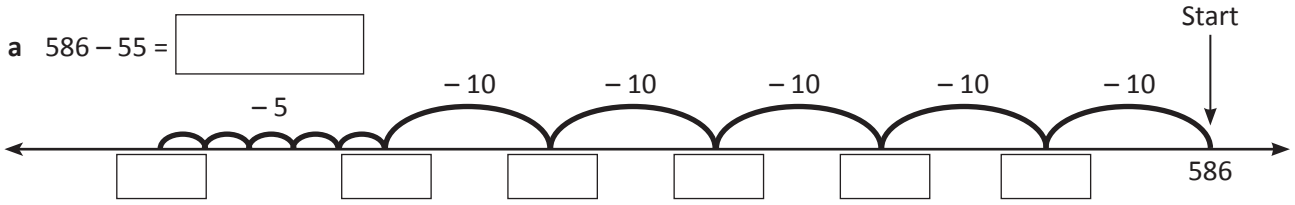
**1** **Warm up with these subtraction wheels:**



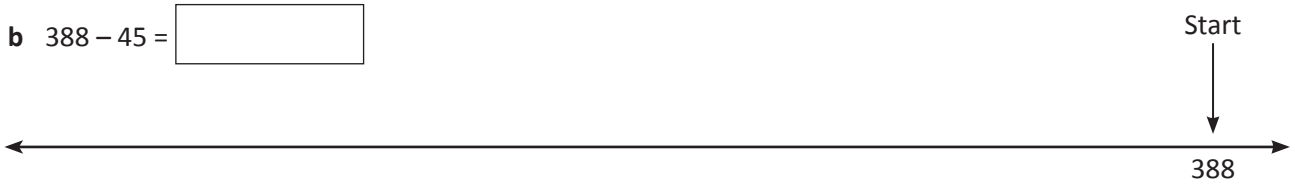




**2** **Use the jump strategy to complete these subtraction problems. The first one has been started for you:**

**a** 586 – 55 = ☐




**b** 388 – 45 = ☐




**c** 624 – 31 = ☐

**d** 155 – 95 = ☐

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# Subtraction mental strategies – jump strategy

**3** **Work out the answers to these by using the jump strategy. See if you can do the working in your head:**

**a** 274 – 30 = ☐ **b** 872 – 61 = ☐ **c** 444 – 50 = ☐

**d** 784 – 61 = ☐ **e** 189 – 35 = ☐ **f** 825 – 60 = ☐

**4** **An electronics store had a sale on the following video games. Use the jump strategy to work out the savings on each item:**

| Bionic Bozo | Revenge of the Ponies | Fitness Frenzy | Taekwondo Team |
|---|---|---|---|
| **Was** $105 | **Was** $135 | **Was** $102 | **Was** $155 |
| **Now** $75 | **Now** $60 | **Now** $91 | **Now** $111 |
| **Save** | **Save** | **Save** | **Save** |

**5** **Use the prices above and the jump strategy to solve these problems. Show your answer and any working out:**

**a** Tahlia saved her pocket money for weeks to buy Fitness Frenzy. She had $120 saved and bought Fitness Frenzy in the sale. How much money did she have left after the purchase?

**b** Martin saved up especially for the sale and bought 2 items for $186. He bought Bionic Bozo and which other game?

**c** Dana bought Taekwondo Team for her husband before the sale. What change did she receive if she paid with 2 $100 notes?



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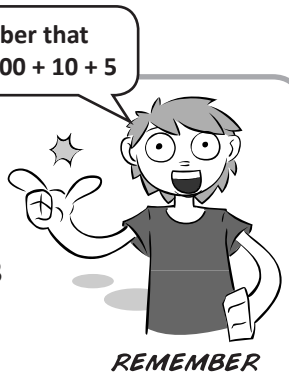
# Subtraction mental strategies – split strategy




When subtracting large numbers in our heads it can be easier to split the number to be subtracted into parts and work with each part separately.

468 – 215 → 200, 10, 5 → 468 – 200 = 268 → 268 – 10 = 258 → 258 – 5 = 253

**468 – 215 = 253**

**1** **Practise splitting these numbers into hundreds, tens and units. The first one is done for you.**

**a** 356 = 300 + 50 + 6 **b** 289 = _____ **c** 867 = _____

**d** 923 = _____ **e** 442 = _____ **f** 294 = _____

**2** **Use the split strategy to subtract:**

**a** 468 – 316

468 – 300 = _____

_____ – 10 = _____

_____ – 6 = _____

468 – 316 = _____

**b** 574 – 155

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

574 – 155 = _____

**c** 457 – 323

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

457 – 323 = _____

**3** **Work out the answers to these questions then cross out the letter above each answer in the puzzle. The letters that remain will form the answer to the riddle.**

**a** 484 – 74 = **b** 400 – 80 = **c** 406 – 106 =

**d** 410 – 40 = **e** 403 – 13 = **f** 455 – 60 =

**g** 497 – 92 = **h** 505 – 25 = **i** 520 – 25 =

**j** 795 – 150 = **k** 410 – 100 =

| S | Y | H | O | U | E | R | X | E | L | A |
|---|---|---|---|---|---|---|---|---|---|---|
| 300 | 195 | 410 | 305 | 150 | 320 | 505 | 370 | 595 | 405 | 200 |

| K | Z | R | I | D | R | J | U | M | V | A |
|---|---|---|---|---|---|---|---|---|---|---|
| 390 | 495 | 220 | 395 | 210 | 385 | 480 | 500 | 205 | 645 | 310 |

**Riddle:** What is the most rhythmic part of your body?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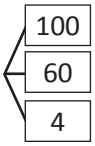
# Subtraction mental strategies – split strategy

**4** **These problems have been completed. Are they correct? If not, circle where it all began to go wrong:**

**a** 375 – 164



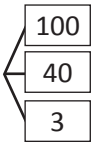

375 – 100 = 275

275 – 60 = 215

215 – 4 = 211

375 – 164 = 211

**b** 429 – 143



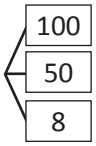

429 – 100 = 323

323 – 4 = 319

319 – 3 = 316

429 – 143 = 316

**c** 179 – 158




179 – 100 = 79

79 – 50 = 39

39 – 8 = 31

179 – 158 = 31

**5** **The following problems require you to add and subtract. Use the split strategy to help you solve them:**

Four different families went on a holiday over Easter. Work out the distance that each car has travelled on the missing days:

| | Robertsons | Pankhursts | Cailes | Darnleys |
|---|---|---|---|---|
| **Day 1** | 125 km | 225 km | | 130 km |
| **Day 2** | 375 km | | 525 km | |
| **Day 3** | | 110 km | 125 km | 270 km |
| **Total distance** | 735 km | 836 km | 950 km | 695 km |

Make as many notes as you need to help you:

**6** **Assuming that each family started their holiday from the same place, work out where each family was at the end of Day 2. Connect the place with the family by drawing a line:**

| Family | Place |
|---|---|
| Robertsons | Damp 'n Crazy Water Park – 726 km |
| Darnleys | The Big Baboon – 825 km |
| Pankhursts | Insect Museum – 425 km |
| Cailes | The Giant Toothbrush – 500 km |



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# Subtraction mental strategies – compensation strategy

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

486 – 59 = 427

486 – 60 (+ 1) *I rounded up by 1, which means I subtracted*

426 (+ 1) = 427 *1 extra so we need to add 1 back.*

**1** **Round these numbers to the closest ten. Then compensate by subtracting or adding to get back to the first number. The first one is done for you.**

**a** 93 = *90 + 3* **b** 48 = _____ **c** 52 = _____ **d** 76 = _____

**e** 57 = _____ **f** 37 = _____ **g** 27 = _____ **h** 68 = _____

**2** **Solve these subtraction problems using compensation. Show all your working out:**

**a** 585 – 78 = ☐

585 – 80 (+ 2)

_____ ◯ = _____

**b** 894 – 71 = ☐

894 – 70 (– 1)

_____ ◯ = _____

**c** 163 – 149 = ☐

163 – 150 (+ 1)

_____ ◯ = _____

**3** **Solve these problems using compensation. Decide if you need to round up or down and compensate accordingly:**

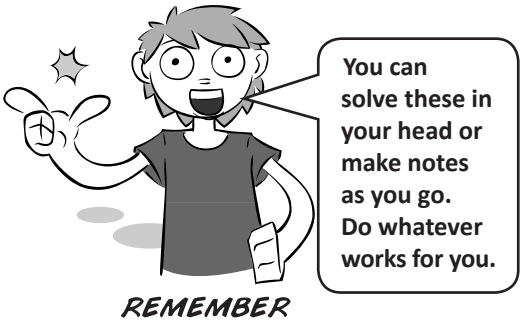
**a** 555 – 63

**b** 775 – 98

**c** 644 – 139

**d** 594 – 329

**e** 432 – 204





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# Subtraction mental strategies – compensation strategy

**4** **Wally the work experience boy has solved these. He is very chuffed because he solved them all correctly. Can you use his working out to establish what the original questions were?**

**a** [454] – [ ] = [427]

454 – 30 = 424 + 3 = 427

**b** [ ] – [ ] = [ ]

568 – 310 = 258 + 2 = 260

**c** [ ] – [ ] = [ ]

994 – 80 = 914 + 2 = 916

**d** [ ] – [ ] = [ ]

678 – 450 = 228 – 2 = 226

**e** [ ] – [ ] = [ ]

684 – 60 = 624 + 1 = 625

**f** [ ] – [ ] = [ ]

348 – 130 = 218 + 2 = 220

**5** **Use the compensation method to count backwards and complete these number patterns.**

| – 17 | – 21 | – 98 | – 33 |
|---|---|---|---|
| 600 | 124 | 395 | 800 |
| 583 | 103 | | |
| | | 199 | |
| 549 | | | |

**6** **These subtraction problems have been partially solved using compensation. Colour match the steps that were used and complete the missing parts. The first one has been done for you:**

| | | | |
|---|---|---|---|
| $4.50 – $2.75 | $5.70 – $3.00 = $2.70 | $2.45 + _____ = | |
| $10.00 – $6.25 | $4.50 – $3.00 = $1.50 | $4.25 + _____ = | |
| $5.70 – $3.05 | $17.25 – $13.00 = $4.25 | $1.50 + _____ = | |
| $17.25 – $12.90 | $9.45 – $7.00 = $2.45 | $4.00 – _____ = | |
| $9.45 – $6.85 | $10.00 – $6.00 = $4.00 | $2.70 – _____ = | *$1.75* |


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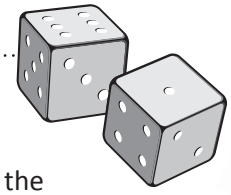
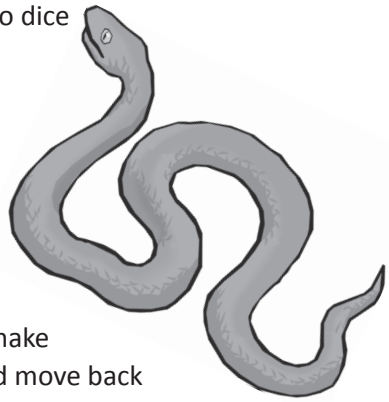
# Snakes but no ladders

apply

**Getting ready**

You can play with 1 to 4 players and you will need two dice and a love of snakes!





**What to do**

Start at 200. Throw the dice and add the numbers. The answer is the number of spaces you can move.

Follow the numbers. If you land on a square with a snake you must work out the answer to the subtraction and move back to that square! The winner is the first to finish … alive!

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 263 **Finish** | 262 (–25) | 261 | 260 | 259 (–32) | 258 | 257 | 256 |
| 248 | 249 (–14) | 250 | 251 | 252 | 253 (–50) | 254 | 255 (–17) |
| 247 | 246 | 245 | 244 (–9) | 243 | 242 | 241 | 240 |
| 232 (–20) | 233 | 234 | 235 | 236 (–3) | 237 | 238 (–14) | 239 |
| 231 | 230 | 229 (–21) | 228 | 227 | 226 (–11) | 225 | 224 |
| 216 (–8) | 217 | 218 | 219 (–5) | 220 (–17) | 221 | 222 | 223 |
| 215 | 214 | 213 (–10) | 212 | 211 | 210 | 209 (–6) | 208 |
| 200 **Start** | 201 | 202 | 203 | 204 (–3) | 205 | 206 | 207 |



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# Darts

apply

**Getting ready**

A game of darts is usually scored by subtracting the number that you throw from 301. Throwing darts can be dangerous in a classroom so you will be throwing dice instead!

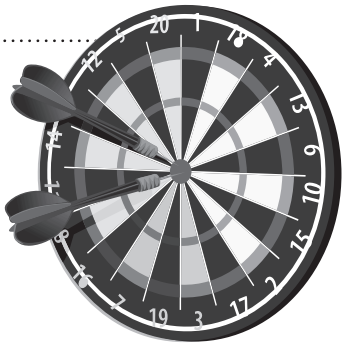
You can play with 1 to 4 people. You will take turns. You will need a copy of this page, two dice, a pencil and paper to keep score.

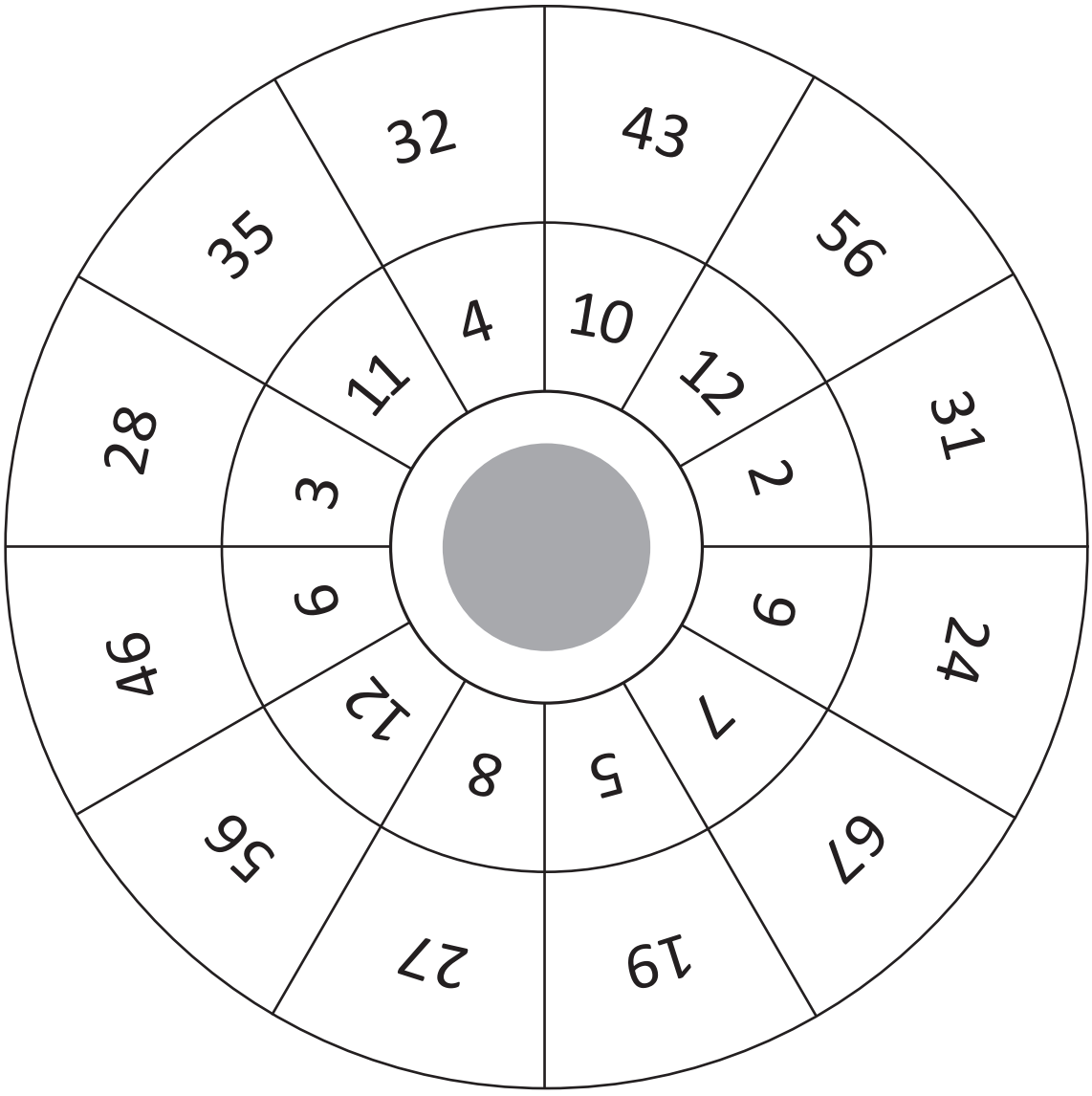
C copy

**What to do**

Throw two dice, find the total and look for the number in the inner ring. The number next to it in the outer ring is the one that you will subtract from. Start subtracting from 301, keeping score as you go.

The winner is the first to get past 0!





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# Written methods – addition

| | H | T | U |
|---|---|---|---|
| | $^{1}2$ | $^{1}3$ | 5 |
| + | 4 | 8 | 9 |
| | 7 | 2 | 4 |

How do we add using a written strategy?
First we estimate: 235 + 500 = 735. Our answer will be around 735.
We start with the units. 5 + 9 is 14 units. We rename this as 1 ten and 4 units.
We put the 4 in the units column and carry the 1 to the tens column.
3 tens plus 8 tens plus the carried ten is 12 tens.
We rename this as 1 hundred and 2 tens
We put the 2 in the tens column and carry the 1 to the hundreds column.
We add the hundreds. We put 7 in the hundreds column.
Finally we check against our estimate – do they match?

**1** **Solve these addition problems. First estimate the answers:**

**a** e:

| | H | T | U |
|---|---|---|---|
| | 5 | 4 | 1 |
| + | 3 | 1 | 3 |
| | | | |

**b** e:

| | H | T | U |
|---|---|---|---|
| | 1 | 7 | 3 |
| + | 5 | 9 | 2 |
| | | | |

**c** e:

| | H | T | U |
|---|---|---|---|
| | 3 | 8 | 4 |
| + | 2 | 1 | 3 |
| | | | |

**d** e:

| | H | T | U |
|---|---|---|---|
| | 2 | 6 | 8 |
| + | 4 | 9 | 3 |
| | | | |

**e** e:

| | Th | H | T | U |
|---|---|---|---|---|
| | 2 | 2 | 1 | 7 |
| + | 3 | 4 | 0 | 8 |
| | | | | |

**f** e:

| | Th | H | T | U |
|---|---|---|---|---|
| | 4 | 5 | 1 | 6 |
| + | 1 | 3 | 4 | 3 |
| | | | | |

**g** e:

| | Th | H | T | U |
|---|---|---|---|---|
| | 5 | 3 | 8 | 9 |
| + | 1 | 2 | 7 | 4 |
| | | | | |

**h** e:

| | Th | H | T | U |
|---|---|---|---|---|
| | 3 | 2 | 8 | 1 |
| + | 1 | 4 | 2 | 8 |
| | | | | |

**2** **Use these cards to make 5 different addition problems using 2 and 3 digit numbers. Show your working out:**

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | = | + |
|---|---|---|---|---|---|---|---|---|---|


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# Written methods – addition

| | H | T | U |
|---|---|---|---|
| | 5 | 6 | 2 |
| + | 1 | 4 | 5 |
| | | | 7 |
| | 1 | 0 | 0 |
| | 6 | 0 | 0 |
| | 7 | 0 | 7 |

We can also add each place value separately and then add these together:

2 + 5 = 7

60 + 40 = 100

500 + 100 = 600

7 + 100 + 600 = 707

**3** **Solve these addition problems using a written strategy of your choice:**

**a** **e:**

| | H | T | U |
|---|---|---|---|
| | 3 | 8 | 5 |
| + | 4 | 2 | 3 |

**b** **e:**

| | H | T | U |
|---|---|---|---|
| | 4 | 1 | 2 |
| + | 2 | 3 | 8 |

**c** **e:**

| | H | T | U |
|---|---|---|---|
| | 9 | 2 | 2 |
| + | | 6 | 9 |

**d** **e:**

| | H | T | U |
|---|---|---|---|
| | 1 | 8 | 8 |
| + | 4 | 1 | 4 |

**e** **e:**

| | H | T | U |
|---|---|---|---|
| | 7 | 2 | 4 |
| + | | 2 | 9 |

**f** **e:**

| | H | T | U |
|---|---|---|---|
| | | 3 | 6 |
| + | 1 | 4 | 4 |

**4** **Can you work out what the missing numbers should be? Remember there may have been some regrouping!**

**a**

| | H | T | U |
|---|---|---|---|
| | 4 | | 5 |
| + | | 2 | |
| | 8 | 5 | 7 |

**b**

| | H | T | U |
|---|---|---|---|
| | $^{1}1$ | $^{1}5$ | 9 |
| + | 2 | 4 | |
| | | 0 | 6 |

**c**

| | H | T | U |
|---|---|---|---|
| | 5 | $^{1}6$ | 7 |
| + | | | 9 |
| | 9 | 9 | |

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# Written methods – subtraction

| | H | T | U |
|---|---|---|---|
| | 9 | $^{8}\not{9}$ | $^{1}4$ |
| – | 2 | 7 | 8 |
| | 7 | 1 | 6 |

First we estimate: 1 000 – 300 = 700

We start with the units. We can't take 8 away from 4 so we must rename one of the tens as units. We now have 14 units.

14 subtract 8 is 6 so we put the 6 in the units column.

8 tens subtract 7 tens is 1 ten so we put a 1 in the tens column.

We subtract the hundreds. 9 hundred subtract 2 hundred is 7 hundred. Put a 7 in the hundreds column.

We check the answer against our estimate.

**1** **Complete the subtraction problems:**

**a**

**e:**

| | Th | H | T | U |
|---|---|---|---|---|
| | 4 | 9 | 8 | 2 |
| – | | 1 | 5 | 3 |
| | | | | |

**b**

**e:**

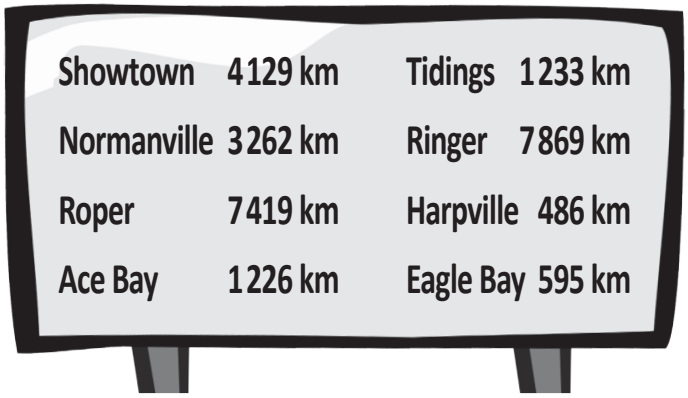
| | Th | H | T | U |
|---|---|---|---|---|
| | 2 | 9 | 5 | 1 |
| – | | 8 | 7 | 8 |
| | | | | |

**c**

**e:**

| | Th | H | T | U |
|---|---|---|---|---|
| | 3 | 8 | 7 | 2 |
| – | | 5 | 8 | 6 |
| | | | | |

When a problem asks us to find the difference, we subtract. We always start with the larger number.




**2** **Solve these to find the difference problems:**

**a** How far from Showtown to Ringer?

| | Th | H | T | U |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

**b** What is the distance from Normanville to Tidings?

| | Th | H | T | U |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

**c** What is the distance from Roper to Eagle Bay?

| | Th | H | T | U |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

**d** How far from Normanville to Ace Bay?

| | Th | H | T | U |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |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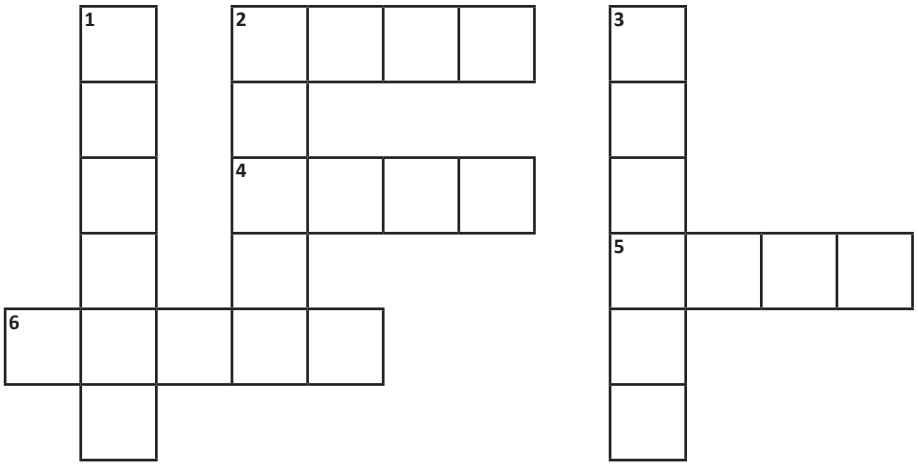
**3** **Use a calculator to add each group of numbers. Turn your calculator upside down to see a word on the screen. Use the key below to help you identify the letters. Write each word in the correct place in the crossword puzzle.**




**CLUES**

**Across**

**2.** 3 025 + 1 589 = _____

**4.** 4 456 + 1 207 = _____

**5.** 2 776 + 2 861 = _____

**6.** 12 824 + 32 251 = _____

**Down**

**1.** 34 569 + 342 047 = _____

**2.** 20 786 + 36 548 = _____

**3.** 456 789 + 120 556 = _____

**Key**

| 0 | 1 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| O | I | E | H | S | G | L | B |

**4** **The answer is 42. What could the missing numbers be? Come up with 5 possibilities:**

| | H | T | U |
|---|---|---|---|
| | | | |
| – | | | |
| | | 4 | 2 |

| | H | T | U |
|---|---|---|---|
| | | | |
| – | | | |
| | | 4 | 2 |

| | H | T | U |
|---|---|---|---|
| | | | |
| – | | | |
| | | 4 | 2 |

| | H | T | U |
|---|---|---|---|
| | | | |
| – | | | |
| | | 4 | 2 |

| | H | T | U |
|---|---|---|---|
| | | | |
| – | | | |
| | | 4 | 2 |



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# Written methods – adding and subtracting decimals

When we add and subtract decimals we follow the same rules we use when working with whole numbers. We need to make sure we line up the place values and the decimal points:

| | T | U | T |
|---|---|---|---|
| | $^{3}\not{4}$ | $^{1}3$ | • 3 |
| − | 1 | 7 | • 2 |
| | 2 | 6 | • 1 |

**1** **Estimate and solve these addition problems. Remember to put the decimal point into your answers:**

**a** e:

| | T | U | T |
|---|---|---|---|
| | 5 | 4 • | 1 |
| + | 3 | 1 • | 3 |

**b** e:

| | T | U | T |
|---|---|---|---|
| | 3 | 2 • | 3 |
| + | 5 | 8 • | 1 |

**c** e:

| | T | U | T |
|---|---|---|---|
| | 4 | 8 • | 4 |
| + | 4 | 1 • | 3 |

**d** e:

| | T | U | T |
|---|---|---|---|
| | 2 | 7 • | 8 |
| + | 3 | 9 • | 3 |

**e** e:

| | T | U | T | H |
|---|---|---|---|---|
| | 5 | 2 • | 1 | 7 |
| + | 3 | 5 • | 9 | 2 |

**f** e:

| | T | U | T | H |
|---|---|---|---|---|
| | 4 | 5 • | 1 | |
| + | 1 | 4 • | 0 | 5 |

**g** e:

| | T | U | T | H |
|---|---|---|---|---|
| | 5 | 3 • | 8 | 9 |
| + | 1 | 2 • | 1 | 4 |

**h** e:

| | T | U | T | H |
|---|---|---|---|---|
| | 3 | 2 • | 4 | 1 |
| + | 1 | 9 • | 3 | 3 |

**2** **Estimate and solve these subtraction problems. Remember to put the decimal point into your answers:**

**a** e:

| | T | U | T |
|---|---|---|---|
| | 8 • | 4 | 3 |
| − | 3 • | 2 | 3 |

**b** e:

| | T | U | T |
|---|---|---|---|
| | 9 • | 0 | 8 |
| − | 5 • | 3 | 2 |

**c** e:

| | T | U | T |
|---|---|---|---|
| | 7 • | 6 | 3 |
| − | 2 • | 0 | 4 |

**d** e:

| | T | U | T |
|---|---|---|---|
| | 9 • | 7 | |
| − | 3 • | 2 | 3 |

**3** **Bart finished his race in a time of 10.67 secs. Lisa finished in 11.24 secs. How much faster was Bart?**


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# Written methods – adding and subtracting decimals

**4** **You bought the following. Find the difference between the discount price and regular price for each item, then calculate your total savings. Show all your working out:**

**Total savings:** _____


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# Written methods – word problems

**1** **Solve the following word problems using addition or subtraction. Circle the process you use to calculate the answer:**

**a** Joe scored 346 more points than Zac. Joe scored 589 points. How many points did Zac score?

\+ .....

− .....

Answer _____

b Jenny is 32 cm taller than Jaala. Jaala is 143 cm tall. How tall is Jenny?

\+ .....

− .....

Answer _____

**c** Maitland recorded 117 mm of rain. Balaklava recorded 58 mm more. How much rain did Balaklava record?

\+ .....

− .....

Answer _____

**d** Wayne has $17. How much more money does he need to buy a t-shirt that costs $39?

\+ .....

− .....

Answer _____

**e** Charlene had $132. After she paid for a ticket, she had $84. How much did the ticket cost?

\+ .....

− .....

Answer _____

**f** Sanjay spent $34 and had $92 left. How much did he have before the purchase?

\+ .....

− .....

Answer _____

**g** Jarred's bike cost $189. Molly's bike cost $263. What is the price difference between the two bikes?

\+ .....

− .....

Answer _____

**h** The rainfall in Two Wells was 73 mm. Gawler recorded 36 mm less. How much rainfall did Gawler record?

\+ .....

− .....

Answer _____

**i** Write your own word problem and solve it.

\+ .....

− .....

Answer _____


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# Slippery dip race

apply

## Getting ready

**Players** 2

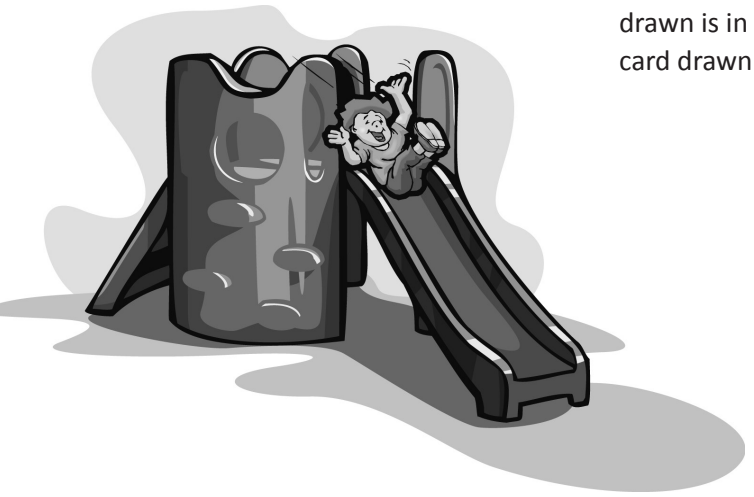
**Objective** To be the first to slide all the way down the slippery dip and land in the sand.

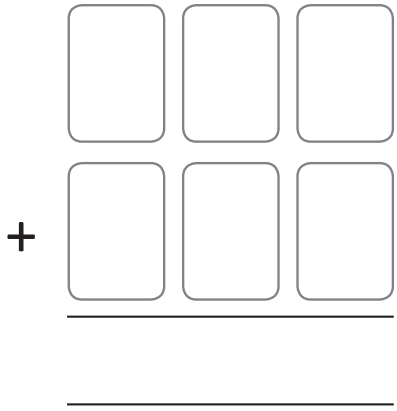
**Materials** Game marker for each player, scrap paper, pencils, deck of cards with tens and picture cards taken out. Ace has a value of 1.

## What to do

**To play**

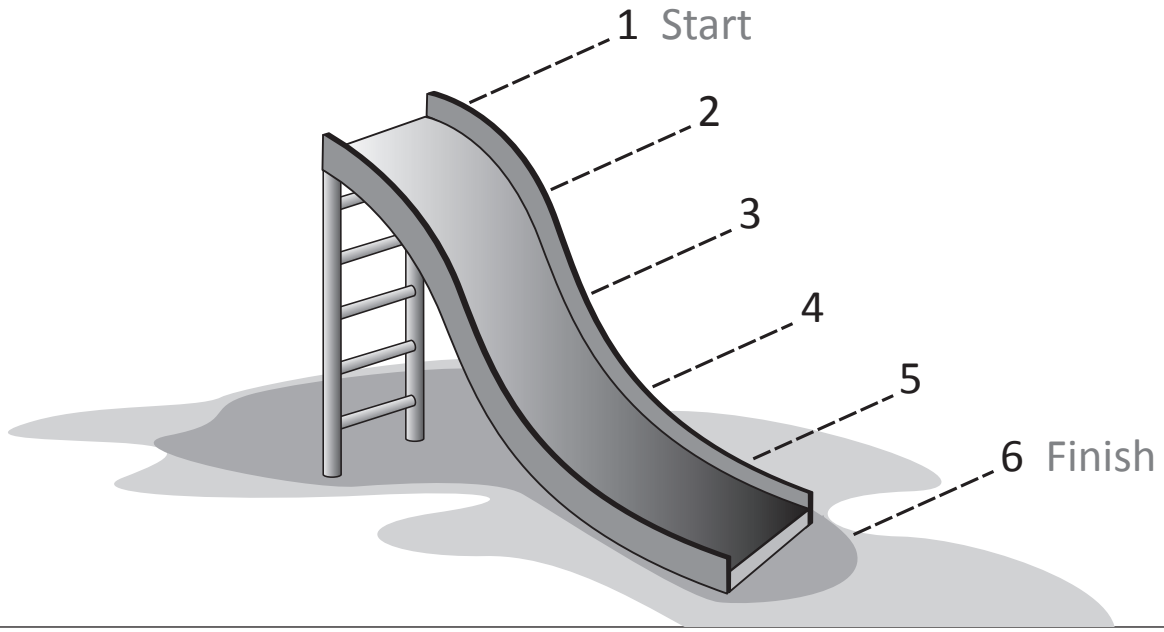
1. Mix up the cards and place them face down in a pile.
2. Players place the game markers at the Start.
3. Each player draws 6 cards arranging them to make two 3 digit-numbers. Arrange the cards as shown: Remember, the first card drawn is in the hundreds place for the first number. The fourth card drawn is in the hundreds place for the second number.






4. Add the 2 numbers. The player with the larger total moves the game marker one space down the slippery dip.
5. Play until someone lands in the sand.

**Variations** Change the number of cards laid out.



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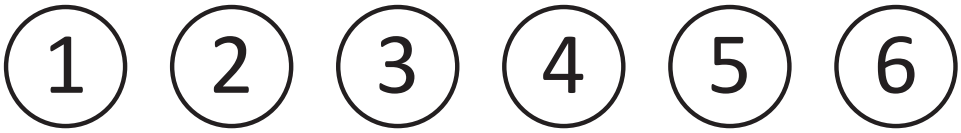
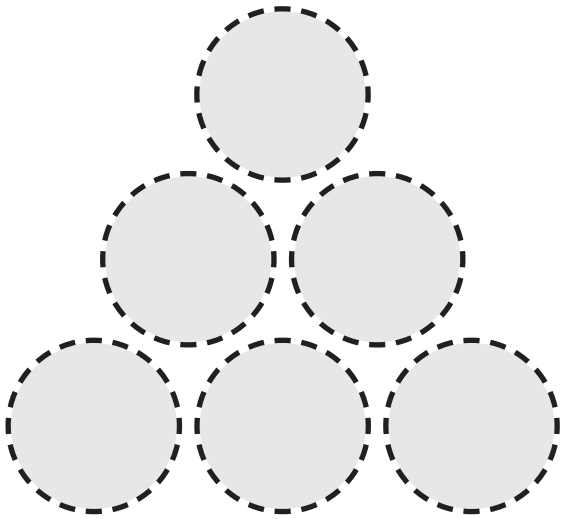
# Subtraction puzzles

solve

**Puzzle 1**

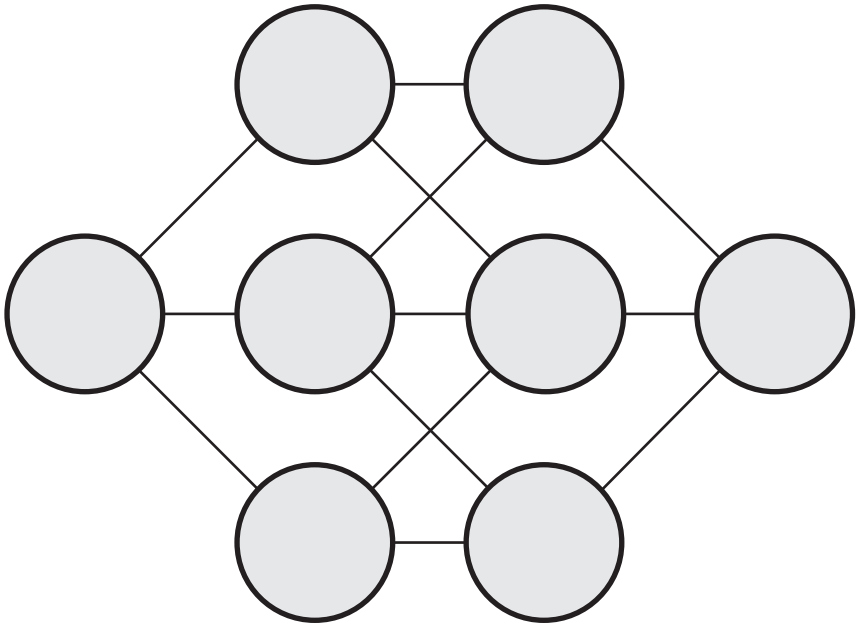
Place the numbers 1 to 6 in the grey circles so that each number is the difference between the two numbers just below it.





**Puzzle 2**

Place eight digits from 1 to 8 in each circle. Numbers with a difference of 1 cannot be placed in circles directly connected by a straight line.





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