

Berry Public School - Stage 3 – Home Learning Week 10

Commencing Monday March 30.

The following tasks are a guide, for parents, to cover some of the Stage 3 curriculum at home this week. Students should complete all activities and e-mail **highlighted activities** to their teachers **at the end of each day**. It is essential that you or your parents come up to school to collect your book package that you will need, to complete your work. It is recommended that you purchase an A4 book for the students to work in. If you require the teacher's direct email please contact the school. If you or your child, have any questions about the tasks below, please contact your child's teacher via email or phone the school.

Please ignore Monday Week 9's work and make a fresh start this week for Week 10.

	Monday	Tuesday	Wednesday	Thursday	Friday
Task	Help an adult with the washing today	Plant a seed or seedling in the garden (or pot) and water it.	Think of a nice surprise for your parents or carers and do it! E.g. Clean your room	Ask an adult for a safe idea for lunch that you can make on your own today.	Research and find some facts about an interesting topic. Talk to an adult about what you have found out.
Morning	English (Spelling) Look at lists provided in the resource pack. Write down the words and identify the target sound. Write your dictation. English (Reading/Writing) Fluency Booklet Semester1 Complete sheet 1 Nutrition Read the directions at the top	English (Spelling) Choose three unfamiliar words from your week 10 list. Write out their dictionary meaning. English (Reading/Writing) Fluency Booklet Semester1 Complete sheet 1 Nutrition Read the directions at the top of the page Do reading #1, #2, #3 and record your times.	English (Spelling) On a word document, use as many of your spelling words as you can to create: - An entertaining paragraph Find as many smaller words as you can in your longest spelling word. English (Reading/Writing) Fluency Booklet Semester	English (Spelling) Put each of your homophones into a sentence to show their meanings. Find synonyms for five of your words where possible. Google an online Thesaurus to help you. Fluency Booklet Semester1 Complete sheet 1 Nutrition Read the directions at the top of the page Complete the ten	English (Spelling) Write out all of your dictation sentences. Writing/ Current affairs Watch this week's BTN and complete a summary on one of the stories. Type on a word document, proof read and edit your work and send it to your class teacher.

	Monday	Tuesday	Wednesday	Thursday	Friday
	<p>of the page Do reading #1, #2, #3 and record your times.</p> <p>Grammar and Punctuation Booklet Term1 Complete page 27 on Verbs</p> <p>Writing Visit: www.pobble365 Choose from the calendar in the top right-hand corner of the page. Monday 30th of March It will be called <i>Rumpelstiltskin</i> On a word document complete and submit by e-mail to your teacher</p> <ul style="list-style-type: none"> • Question time • Sick Sentences • Sentence challenge 	<p>Grammar and Punctuation Booklet Term1 Complete page 28 on Verbs</p> <p>Writing Visit: www.pobble365 Choose from the calendar in the top right-hand corner of the page. Monday 30th of March It will be called <i>Rumpelstiltskin</i> On a word document complete and submit by e-mail to your teacher the story starter. This needs to be proof read and edited.</p> <p>Reading: Spend some time quietly reading your AR book or a book from your home library. Do an AR quiz?</p>	<p>1 Complete sheet 1 Nutrition <u>Read the directions at the top of the page</u> Do reading #1, #2, #3 and record your times.</p> <p>Grammar and Punctuation Booklet Term1 Complete page 48 on Adjectives</p> <p>Reading: Spend some time quietly reading your AR book or a book from your home library. Do an AR quiz?</p>	<p>comprehension questions on the back of the Nutrition page.</p>	<p>Reading: Spend some time quietly reading your AR book or a book from your home library. Do an AR quiz?</p>
Break	Have a break.	Have a break.	Have a break.	Have a break.	Have a break.
Middle	<p>Mathematics Mentals Monday Week2 Parents to mark please Speed Test Persistence Booklet page 7- column 1 Warm Up:</p> <p>Login to Mathletics – https://login.mathletics.com/ Mathletics Live: 15 mins Complete two of your set Mathletics Tasks</p>	<p>Mathematics Mentals Tuesday Week2 Parents to mark please Speed Test Persistence Booklet page 7- column 2 Warm Up:</p> <p>Login to Mathletics – https://login.mathletics.com/ Mathletics Live: 15 mins Complete two of your set Mathletics Tasks</p>	<p>Mathematics Mentals Wednesday Week2 Parents to mark please Speed Test Persistence Booklet page 7- column 3 Warm Up:</p> <p>Login to Mathletics – https://login.mathletics.com/ Mathletics Live: 15 mins Complete two of your set</p>	<p>Mathematics Mentals Thursday Week2 Parents to mark please Speed Test Persistence Booklet page 7- column 4 Warm Up:</p> <p>Login to Mathletics – https://login.mathletics.com/ Mathletics Live: 15 mins Complete two of your set Mathletics Tasks Teachers will check your</p>	<p>Mathematics Mentals/ Problem Solving and Friday Test Week2 Parents to mark please Speed Test Persistence Booklet page 7- column 5 Warm Up:</p> <p>Login to Mathletics – https://login.mathletics.com/ Mathletics Live: 15 mins Complete two of your set</p>

Berry Public School					
Monday		Tuesday		Wednesday	
Thursday		Friday			
	Daily Focus - Subtraction E.g Watch: Mathantics "Basic Subtraction" https://www.youtube.com/watch?v=Y6M89-6106I Complete Worksheet Year 5 p40 attached Year 6 p10 attached Pythagoras Maths Group p3 attached Archimedes Maths Group extension <u>students may complete</u> the Year 6 page.	Daily Focus – Prime and Composite numbers Complete Worksheet Year 5 p41 attached Year 6 p41 attached Pythagoras Maths Group p29 attached Archimedes Maths Group extension <u>students may complete</u> the Year 6 page.	Mathletics Tasks Daily Focus – 2 D shapes/triangles Complete Worksheet Year 5 p42 attached Year 6 p42 attached Pythagoras Maths Group p5 attached Archimedes Maths Group extension <u>students may complete</u> the Year 6 page.	<u>progress online.</u> Daily Focus – Measurement/Area Eg Watch: Mathantics "Area" https://www.youtube.com/watch?v=xCdXURXMdFY Complete Worksheet Year 5 p43 attached Year 6 p43 attached Pythagoras Maths Group p23 attached Archimedes Maths Group extension <u>students may complete</u> the Year 6 page.	Mathletics Tasks No daily focus lots of work in your mental book with both Problem Solving and Friday test pages.
Break	Have a recess break.	Have a recess break.	Have a recess break.	Have a recess break.	Have a recess break.
Afternoon	Dance/Music: E.g. • Watch "Let's Dance – Party Rock Anthem" Have a go!! If you enjoy it, try another dance https://www.youtube.com/watch?v=6h5LleoWoa4 AND/OR E.g. • Listen to the song: 'Saltwater' by Julian Lennon https://www.youtube.com/watch?v=oGQiqq9N1jo Learn the lyrics. Illustrate each verse. Write about the message this song is trying to get across to the audience.	Science: Have you planted your plants from Plant Prop If not do so. Draw a rough sketch of where it is. Does it have, sun, water, and fertiliser. Draw a picture of your plant or take a photo of it. Compare the picture in the coming weeks.	Art: Visit: www.pobble365 Choose from the calendar in the top right-hand corner of the page. Monday 30 th of March It will be called <i>Rumpelstiltskin</i> Complete <i>Perfect Picture</i>	History: Federation Create a travel brochure. 1 sheet of A4 paper folded into three columns. First page is the title + pictures of Canberra's highlights. Can be drawn or printed. Second page location Where is Canberra? What is it near? Draw a map. Third page, choose a landmark/tourist attraction and write a detailed report on: Where it is? Why it is so well known? Interesting facts. Pictures, pictures! Make your brochure interesting and colourful.	PD/H/PE: Review: Look at your physical activity diary for this week. Calculate how much time each day was spent on physical activity. Remember you need to do an activity that will make your heart work hard!



5/6 Spelling Term 1 Week 10. Revision



Level 3
require
telephone
immune
reduce
decide

Level 4
entirely
compose
signature
adventure
parasite

Level 5
emphasise
remoteness
adventurous
rejuvenate
anecdote

Ext
blithe
chide
docile
bovine
chastise

Challenge Words

independent
casual
banquet
tranquil
ominous
abomination
benefactor
debilitated
effectively
facilitator

High Frequency - light, noise, move, push, opposite

Homophones - current, careful, state, statement, lessen

Rule Words care, careful, state, statement, safely

Rule: Keep the final e if the ending starts with a consonant.

Etymological: audio means I hear: audience, audiovisual, auditorium, auditory, audible

autos means self: autograph, autobiography, automatic, automation, autocracy

Term 1 week 10 Dictation

Be careful with how you use your telephone if you decide to reduce your bill. It will lessen costs if you don't call at all. + require, immune, care, state, statement, safely, currency, hall, haul, lesson, noise, move, light, push, opposite

The parasite went on an adventure and entirely composed a new parasite law which needed his signature.

The tour company had to emphasise the remoteness of the resort so the adventurous travellers would not be alarmed. + rejuvenate, independent, casual, banquet, ominous

I had to chide and chastise the normally docile bovine after it effectively debilitated the tournament facilitator. + abomination, benefactor, blithe

Learning to trade in a subtraction

2 thousands from 5 thousands equals 3 thousands.

4 hundreds from 2 hundreds can't be done, so trade a thousand from the thousands column to make 12 hundreds. 6 thousand becomes 5 thousand. 4 hundreds from 12 hundreds equals 8 hundreds.

Thou Hund Tens Ones

$$\begin{array}{r} \overset{5}{6} \overset{1}{2} \overset{4}{5} \overset{1}{3} \\ - 2 \ 4 \ 2 \ 4 \\ \hline 3 \ 8 \ 2 \ 9 \end{array}$$

Subtract 2 tens from 4 tens equals 2 tens.

4 ones from 3 ones can't be done. Trade a ten from the tens column to the ones column to make 13 ones. 5 tens becomes 4 tens. 4 ones from 13 ones equals 9 ones.

1 Complete these subtractions with trading in the ones.

a Thou Hund Tens Ones

$$\begin{array}{r} 6 \ 9 \ 5 \ 4 \\ - 4 \ 0 \ 0 \ 7 \\ \hline \end{array}$$

b Thou Hund Tens Ones

$$\begin{array}{r} 7 \ 4 \ 3 \ 5 \\ - 3 \ 0 \ 0 \ 7 \\ \hline \end{array}$$

c Thou Hund Tens Ones

$$\begin{array}{r} 9 \ 6 \ 7 \ 2 \\ - 6 \ 5 \ 4 \ 8 \\ \hline \end{array}$$

d Thou Hund Tens Ones

$$\begin{array}{r} 8 \ 9 \ 3 \ 3 \\ - 5 \ 3 \ 2 \ 5 \\ \hline \end{array}$$

e Thou Hund Tens Ones

$$\begin{array}{r} 5 \ 5 \ 5 \ 2 \\ - 4 \ 3 \ 2 \ 4 \\ \hline \end{array}$$

2 Complete these subtractions with trading in the tens or ones.

a Thou Hund Tens Ones

$$\begin{array}{r} 5 \ 4 \ 5 \ 8 \\ - 4 \ 2 \ 7 \ 6 \\ \hline \end{array}$$

b Thou Hund Tens Ones

$$\begin{array}{r} 3 \ 5 \ 8 \ 4 \\ - 3 \ 4 \ 4 \ 6 \\ \hline \end{array}$$

c Thou Hund Tens Ones

$$\begin{array}{r} 7 \ 8 \ 3 \ 7 \\ - 6 \ 5 \ 5 \ 6 \\ \hline \end{array}$$

d Thou Hund Tens Ones

$$\begin{array}{r} 8 \ 5 \ 6 \ 4 \\ - 7 \ 2 \ 8 \ 6 \\ \hline \end{array}$$

e Thou Hund Tens Ones

$$\begin{array}{r} 4 \ 4 \ 8 \ 3 \\ - 2 \ 1 \ 2 \ 8 \\ \hline \end{array}$$

f Thou Hund Tens Ones

$$\begin{array}{r} 6 \ 3 \ 9 \ 1 \\ - 2 \ 1 \ 6 \ 6 \\ \hline \end{array}$$

g Thou Hund Tens Ones

$$\begin{array}{r} 7 \ 5 \ 3 \ 0 \\ - 2 \ 3 \ 8 \ 6 \\ \hline \end{array}$$

h Thou Hund Tens Ones

$$\begin{array}{r} 8 \ 6 \ 0 \ 0 \\ - 3 \ 4 \ 6 \ 4 \\ \hline \end{array}$$

i Thou Hund Tens Ones

$$\begin{array}{r} 7 \ 5 \ 0 \ 0 \\ - 3 \ 6 \ 6 \\ \hline \end{array}$$

j Thou Hund Tens Ones

$$\begin{array}{r} 6 \ 6 \ 0 \ 0 \\ - 2 \ 2 \ 6 \\ \hline \end{array}$$

From Sydney



CANBERRA 284 km

MELBOURNE 869 km

ADELAIDE 1422 km

KALGOORLIE 3440 km

PERTH 3967 km

BROOME 5280 km

3 Calculate the distances between:

a Melbourne and Canberra

b Adelaide and Canberra

c Kalgoorlie and Adelaide

d Perth and Melbourne

e Perth and Canberra

f Broome and Perth

Prime numbers are numbers that have only themselves and 1 as factors e.g. 2, 3, 5 and 7 are prime numbers but 4, 8 and 9 are not.

Composite numbers are numbers with more than two factors, e.g. 24 has factors of 1, 2, 3, 4, 6, 8, 12 and 24.

- 4** Write all the factors of these numbers, then write whether they are prime or composite.

	Number	Factors	Prime or composite
a	8		
b	7		
c	9		
d	11		

	Number	Factors	Prime or composite
e	18		
f	16		
g	23		
h	17		

- 5** Write prime or composite after each number.

- | | | |
|------------|------------|------------|
| a 5 _____ | e 29 _____ | i 32 _____ |
| b 20 _____ | f 42 _____ | j 37 _____ |
| c 19 _____ | g 31 _____ | k 40 _____ |
| d 24 _____ | h 60 _____ | l 45 _____ |

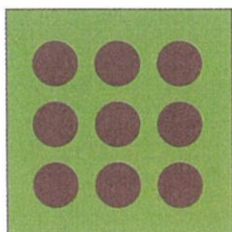
Prime numbers have only themselves and 1 as factors.



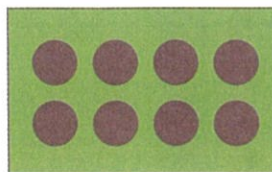
- 6** Explain why you agree or disagree with these statements.

- a All odd numbers are prime numbers. _____
- b There are more composite numbers than prime numbers. _____

7 Square and oblong numbers



9 is a "square" number.



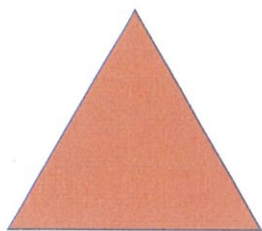
8 is an "oblong" number.

Write the numbers under 101 that are both square and oblong.

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A **triangle** is a three-sided shape with three angles. The total of all angles is always 180° . There are three main types of triangle: **equilateral**, **isosceles** and **scalene**.

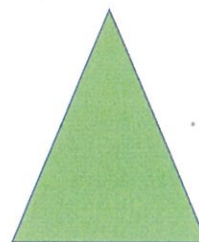
8 Study the three types of triangle pictured, then answer the questions.



Equilateral triangle



Scalene triangle

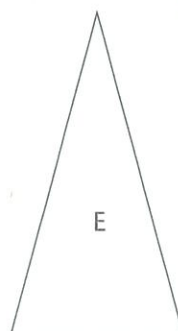
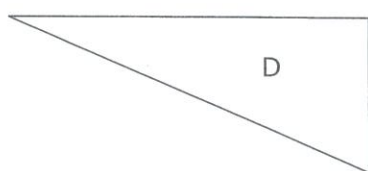
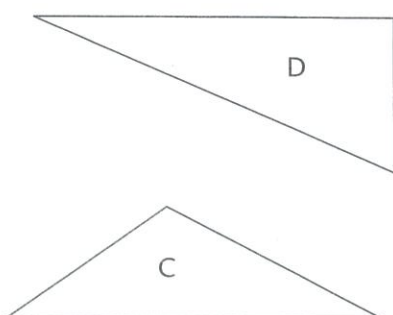
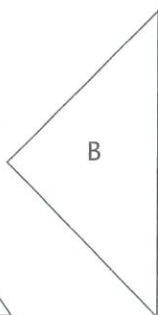
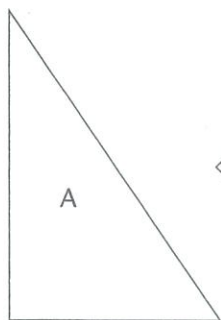


Isosceles triangle

- a** Which triangle has all sides of equal length?
- b** Which triangle has only two sides of equal length?
- c** Which triangle has all angles the same size?
- d** Which triangle has only two angles the same size?
- e** Which triangle has no sides the same length?
- f** Which triangle has no angles the same size?

A right-angled triangle is a triangle in which one angle is a right angle.

9 Colour the right-angled triangles.



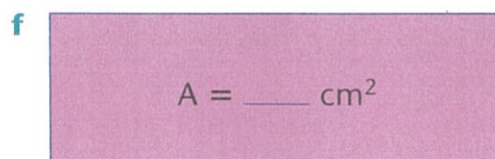
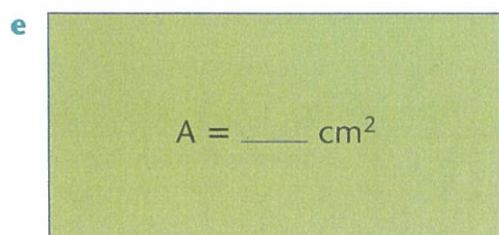
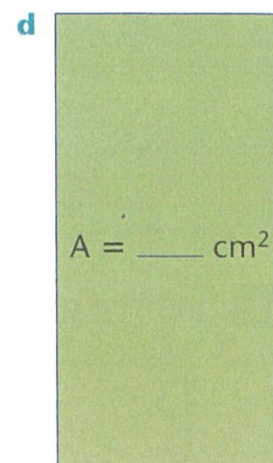
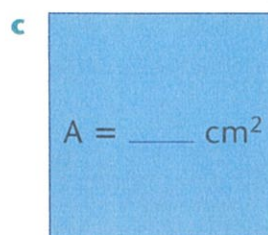
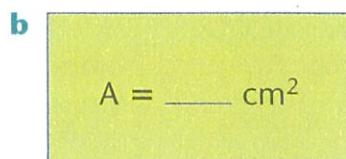
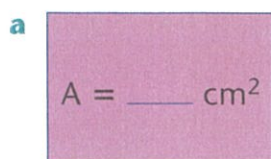
Did you find three right-angled triangles?



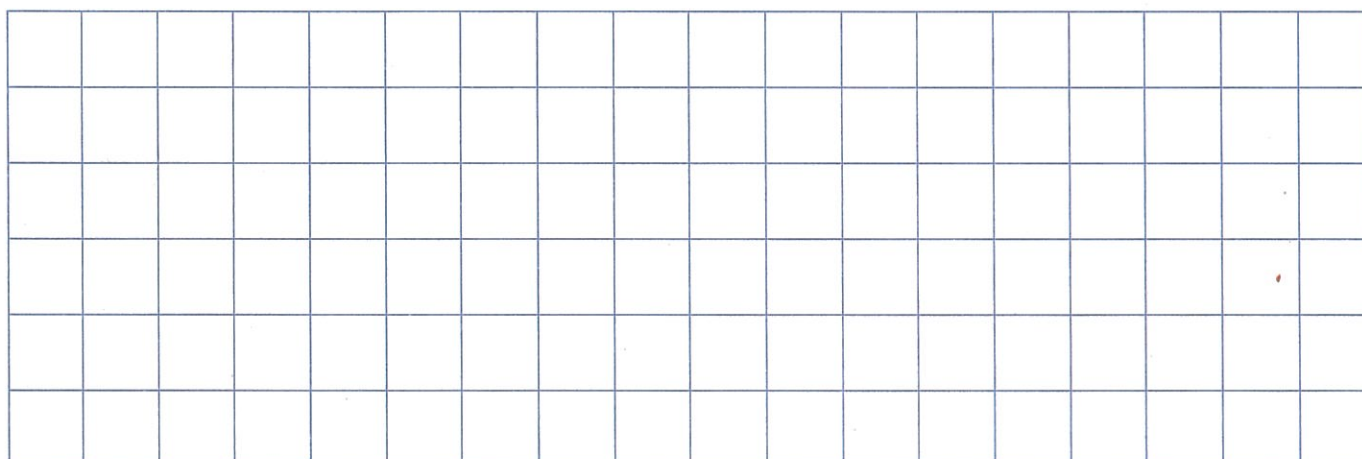
10 Sketch examples of each triangle. The dot paper may help you.



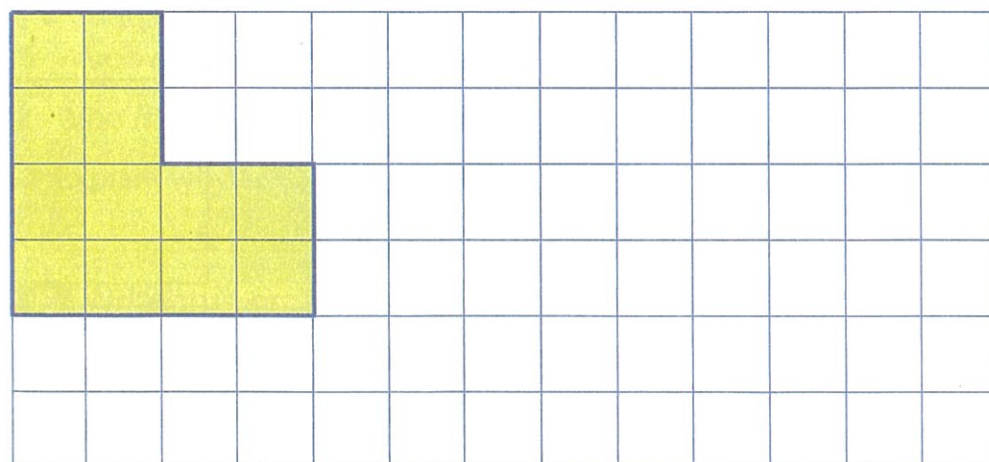
- 11** Use the formula "length \times width = area" to calculate the area of each shape in square centimetres.



- 12** Use the formula "length \times width = area" to create two rectangles, each with an area of 24 cm^2 .



- 13** Kate drew this 12 cm^2 shape and told her friend that all shapes with a 12 cm^2 area have a perimeter of 16 cm . Draw two more shapes of 12 cm^2 to find out if Kate is right.



Are area and perimeter related?



Sometimes trading is needed when subtracting.

Thous Hund Tens Ones

$$\begin{array}{r} 5\cancel{8} \quad 14 \quad 7\cancel{8} \quad 16 \\ - 2 \quad 9 \quad 5 \quad 7 \\ \hline 3 \quad 5 \quad 2 \quad 9 \end{array}$$

Don't forget to trade!



Step 1	7 from 6 can't do. Trade a 10 from the tens column. There are now 7 tens in the tens column and 16 ones in the ones column. $16 - 7 = 9$ Record 9 on the answer line in the ones column.
Step 2	5 tens from 7 tens = 2 tens Record 2 on the answer line in the tens column.
Step 3	9 hundreds from 4 hundreds can't do. Trade 1000 from the thousands column. There are now 5 thousands in the thousands column and 14 hundreds in the hundreds column. $14 - 9 = 5$ Record 5 on the answer line in the hundreds column.
Step 4	2 thousands from 5 thousands = 3 thousands. Record 3 on the answer line in the thousands column.

1 Complete each algorithm.

a	$\begin{array}{r} 4706 \\ - 2300 \\ \hline \end{array}$	b	$\begin{array}{r} 8034 \\ - 7000 \\ \hline \end{array}$	c	$\begin{array}{r} 8666 \\ - 6582 \\ \hline \end{array}$	d	$\begin{array}{r} 7503 \\ - 986 \\ \hline \end{array}$	e	$\begin{array}{r} 7777 \\ - 4600 \\ \hline \end{array}$
f	$\begin{array}{r} 5630 \\ - 46 \\ \hline \end{array}$	g	$\begin{array}{r} 8570 \\ - 723 \\ \hline \end{array}$	h	$\begin{array}{r} 7400 \\ - 6548 \\ \hline \end{array}$	i	$\begin{array}{r} 8500 \\ - 7004 \\ \hline \end{array}$	j	$\begin{array}{r} 7000 \\ - 6038 \\ \hline \end{array}$

2 Fill in the empty boxes to complete these algorithms.

a	$\begin{array}{r} 587\Box \\ - 2\Box59 \\ \hline 3517 \end{array}$	b	$\begin{array}{r} 8763 \\ - \Box40\Box \\ \hline 6355 \end{array}$	c	$\begin{array}{r} 51\Box4 \\ - 3527 \\ \hline \Box637 \end{array}$	d	$\begin{array}{r} 798\Box \\ - \Box58 \\ \hline 7528 \end{array}$	e	$\begin{array}{r} 95\Box1 \\ - 3672 \\ \hline 5\Box6\Box \end{array}$
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3 Calculate the profit made on each item by comparing the cost price and the selling price.



	Ring	Bracelet	Necklace	Watch	Earrings	Nose ring	Locket
Selling price							
Cost price	\$2385	\$1986	\$898	\$395	\$809	\$157	\$48
Profit							

5 Study the rules for divisibility to aid you in identifying factors.

2	The last digit is an even number.
3	The sum of the digits add to be a multiple of 3, for example $63 = 6 + 3 = 9$
4	The last 2 digits are multiples of 4, for example <u>912</u>
5	The last digit is a 5 or a 0
6	No rule
7	No rule
8	The last 3 digits are multiples of 8, for example <u>5160</u>
9	The sum of the digits is a multiple of 9, for example $54 = 5 + 4 = 9$
10	The last digit is a 0

Prime numbers are numbers that only have themselves and 1 as factors. Composite numbers are numbers with more than 2 factors.

6 Use these rules to identify the prime and composite numbers below.

- a 54 composite h 77 _____ o 63 _____
 b 80 _____ i 93 _____ p 65 _____
 c 64 _____ j 97 _____ q 67 _____
 d 81 _____ k 86 _____ r 69 _____
 e 71 _____ l 66 _____ s 73 _____
 f 83 _____ m 76 _____ t 75 _____
 g 99 _____ n 98 _____ u 79 _____

7 Shade the numbers in the grid that are divisible by the given divisor.

	Divisor	Number					
a	2	14	100	248	152	2157	
b	3	18	396	67	225	1233	
c	4	28	112	1442	1347	3856	
d	5	50	275	171	2275	4723	
e	8	68	248	1480	2344	1560	
f	9	83	135	3348	3448	2557	
g	10	997	990	1040	3395	10000	

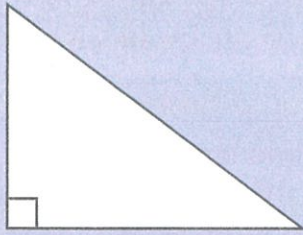
297 is divisible by 9 because $2 + 9 + 7 = 18$ which is a multiple of 9.



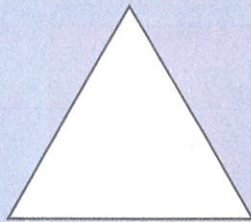
8 Create 4 numbers of at least 3 digits that are divisible by 4. _____

9 Create 4 numbers of at least 3 digits that are divisible by 8. _____

10 Create 4 numbers of at least 3 digits that are divisible by 9. _____



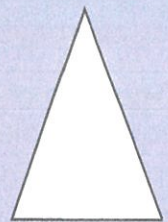
Right-angle triangle



Equilateral triangle



Scalene triangle



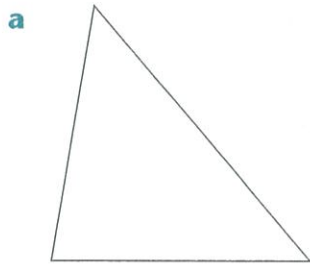
Isosceles triangle

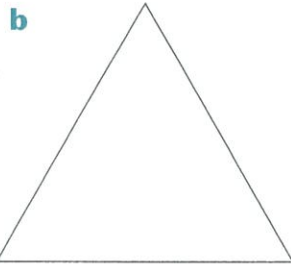
11 Study the triangles above then answer the questions.

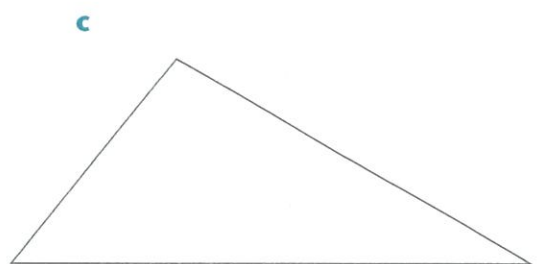
- Which triangle above always has a right angle?
- Which triangle has 3 sides the same length and 3 angles the same size?
- Which triangle has two sides the same length and two angles the same size?
- Which triangle has no sides the same length, no angles the same size and does not contain a right angle?

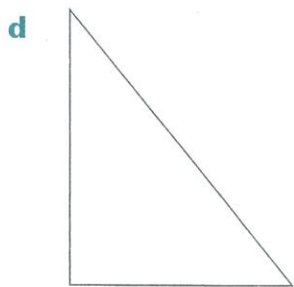
12 Name each triangle then measure their angles.

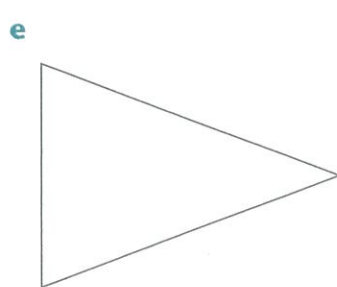
Remember that the total of all the angles in a triangle must add up to 180° .

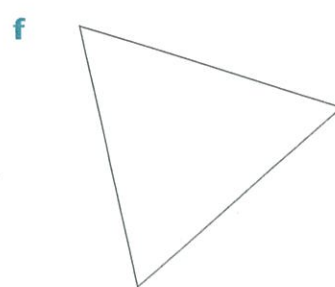


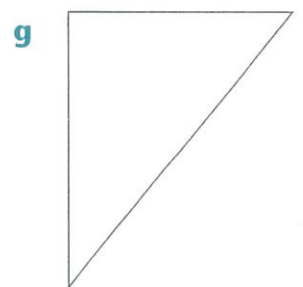




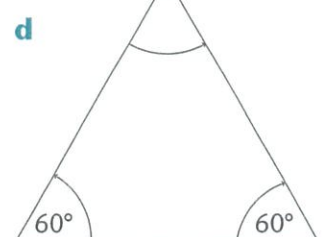
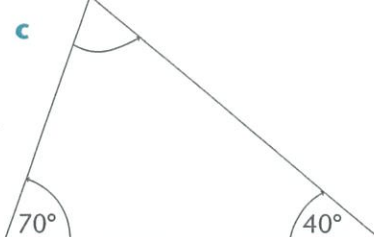
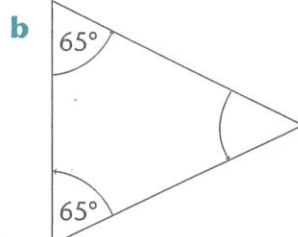
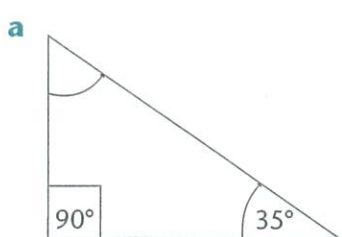




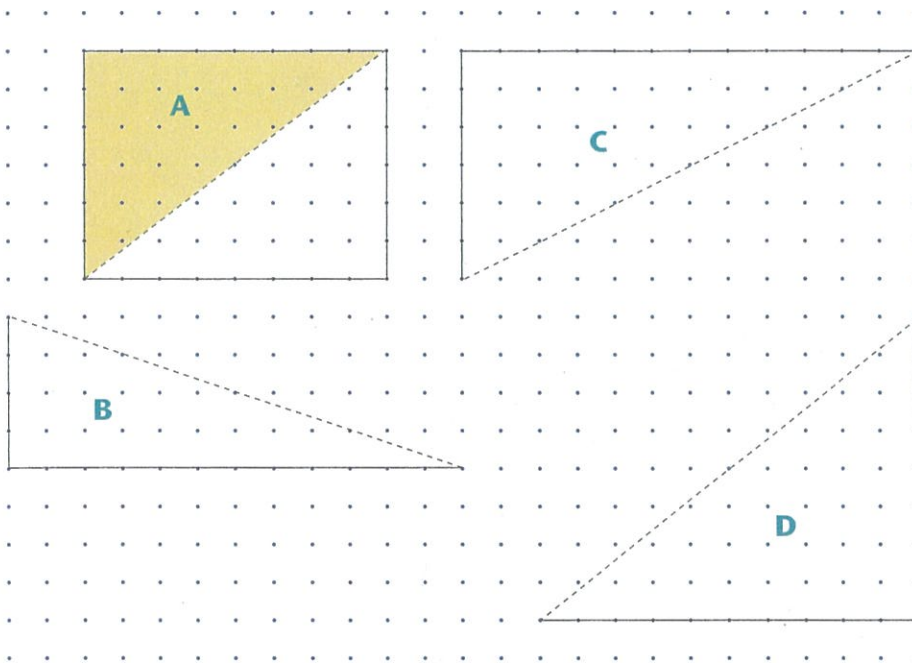












13 Find the missing angle in each triangle.



- 14** Convert these triangles into rectangles that are double in area. Record the area of each shape in the grid. The first one has been done for you.

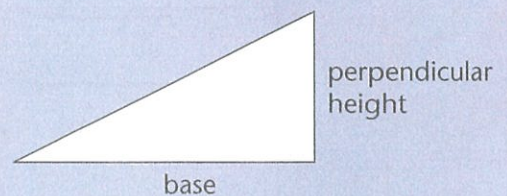


Shape	Area
 A	12 cm ²
 A	6 cm ²
 B	
 B	
 C	
 C	
 D	
 D	

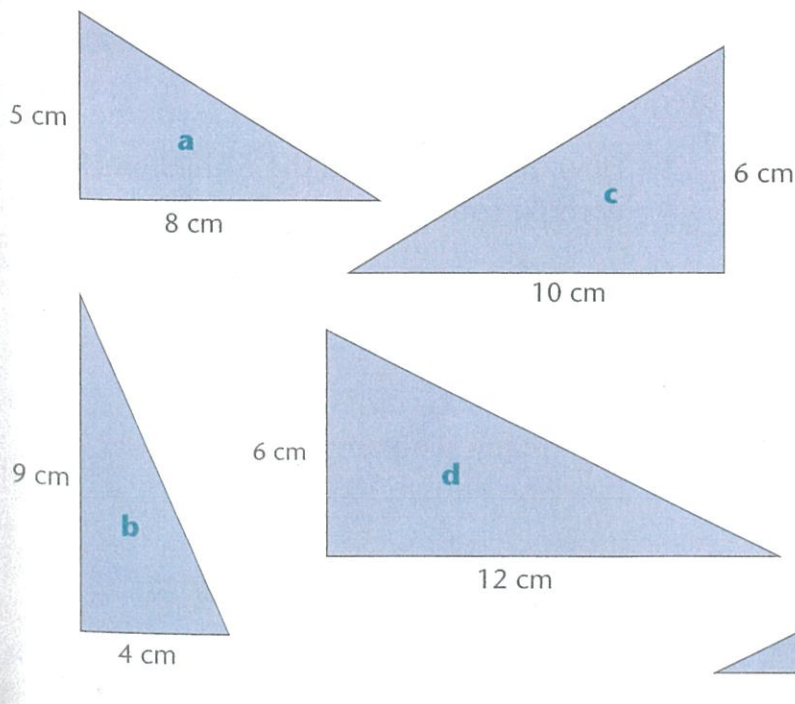
The area of a triangle is found by applying the formula:

$$\text{Area} = \frac{1}{2} \text{ base} \times \text{perpendicular height}$$

This formula actually shows that a triangle is half the area of a rectangle of the same length and perpendicular height.



- 15** Use the formula to calculate the area of the triangles.



	Base $\times \frac{1}{2}$	Height	Area
a			cm ²
b			cm ²
c			cm ²
d			cm ²
e			cm ²



6 Complete each algorithm.

a	$\begin{array}{r} 47067 \\ - 23004 \\ \hline \end{array}$	b	$\begin{array}{r} 80346 \\ - 70008 \\ \hline \end{array}$	c	$\begin{array}{r} 86667 \\ - 65826 \\ \hline \end{array}$	d	$\begin{array}{r} 75033 \\ - 9869 \\ \hline \end{array}$	e	$\begin{array}{r} 67777 \\ - 44600 \\ \hline \end{array}$
f	$\begin{array}{r} 456307 \\ - 463 \\ \hline \end{array}$	g	$\begin{array}{r} 658570 \\ - 723 \\ \hline \end{array}$	h	$\begin{array}{r} 767400 \\ - 406548 \\ \hline \end{array}$	i	$\begin{array}{r} 878500 \\ - 637004 \\ \hline \end{array}$	j	$\begin{array}{r} 987000 \\ - 486038 \\ \hline \end{array}$
k	$\begin{array}{r} 256789 \\ - 3596 \\ \hline \end{array}$	l	$\begin{array}{r} 357406 \\ - 27480 \\ \hline \end{array}$	m	$\begin{array}{r} 267309 \\ - 36987 \\ \hline \end{array}$	n	$\begin{array}{r} 576208 \\ - 26708 \\ \hline \end{array}$	o	$\begin{array}{r} 374008 \\ - 36649 \\ \hline \end{array}$

7 Bill's house renovations.

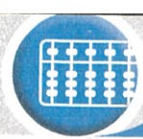
- a Bill bought a house at Mangerton for \$297 000 and sold it for \$354 500. How much profit did he make? _____
- b Bill bought a house at Corrimal for \$289 050 and sold it for \$347 250. How much profit did he make? _____
- c Bill bought a house at Dapto for \$277 980 and sold it for \$333 550. How much profit did he make? _____
- d Bill bought a house at Kiama for \$317 450 and sold it for \$377 590. How much profit did he make? _____
- e Bill bought a house at Mt Keira for \$312 250 and sold it for \$390 500. How much profit did he make? _____



SUPER QUESTION

- 8 To claim travelling expenses on her tax return, Christina keeps a 'log book' which shows her car's odometer reading at the beginning and at the end of each trip. Help her calculate the distances covered and the amounts she can claim calculated at 15c per kilometre.

	Date	Beginning of trip	End of trip	Kilometres travelled	Amount claimed
a	18/9	38 542	39 461		
b	19/10	43 814	44 002		
c	4/11	44 629	44 913		
d	29/3	52 414	52 739		
e	24/4	55 029	55 216		
f		Total			



4 Study the rules for divisibility to aid you in identifying factors.

÷	2	The last digit is an even number.
÷	3	The sum of the digits add to be a multiple of 3, e.g. $63 = 6 + 3 = 9$.
÷	4	The last 2 digits are multiples of 4, e.g. <u>912</u> .
÷	5	The last digit is a 5 or a 0.
÷	6	No rule.
÷	7	No rule.
÷	8	The last 3 digits are multiples of 8, e.g. <u>5160</u> .
÷	9	The sum of the digits is a multiple of 9, e.g. $54 = 5 + 4 = 9$.
÷	10	The last digit is a 0.

Prime numbers are numbers that only have themselves and one as factors. Composite numbers are numbers with more than 2 factors.



5 Use these rules to identify the prime and composite numbers below.

a	54	composite	h	77	_____	o	9162	_____
b	80	_____	i	93	_____	p	7265	_____
c	64	_____	j	97	_____	q	5363	_____
d	81	_____	k	886	_____	r	1269	_____
e	71	_____	l	966	_____	s	8473	_____
f	83	_____	m	776	_____	t	7575	_____
g	99	_____	n	598	_____	u	8779	_____

6 Shade the numbers in the grid that are divisible by the given divisor.

	Divisor	Number				
a	2	14	100	248	152	2157
b	3	18	396	67	225	1233
c	4	28	112	1442	1347	3856
d	5	50	275	171	2275	4723
e	8	68	248	1480	2344	1560
f	9	83	135	3348	3448	2557
g	10	997	990	1040	3395	10 000

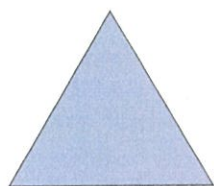
297 is divisible by 9 because $2 + 9 + 7 = 18$ which is a multiple of 9



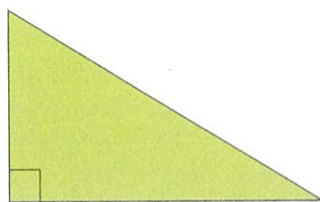
7 Create four numbers of at least 3 digits that are divisible by 4. _____

8 Create four numbers of at least 3 digits that are divisible by 8. _____

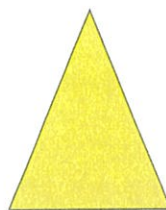
9 Create four numbers of at least 3 digits that are divisible by 9. _____



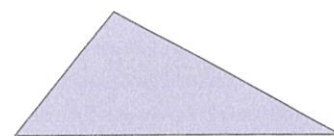
Equilateral triangle



Right-angle triangle



Isosceles triangle

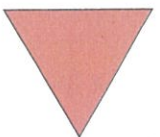
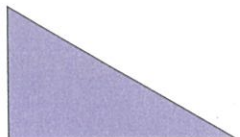
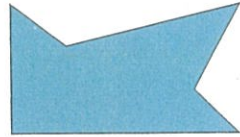


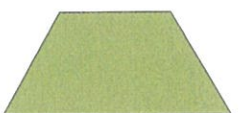



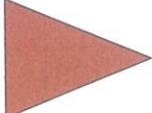
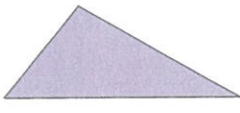
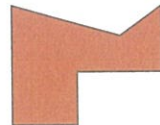


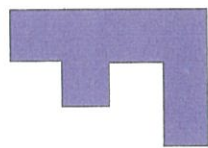
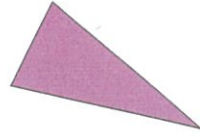


Scalene triangle

13 Answer the questions.

- Which triangle has 3 sides the same length and 3 angles the same size? _____
- Which triangle has 2 sides the same length and 2 angles the same size? _____
- Which triangle has no sides the same length and no angles the same size? _____
- Which triangle contains a right angle? _____

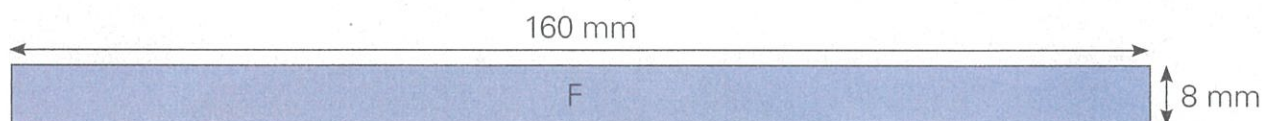
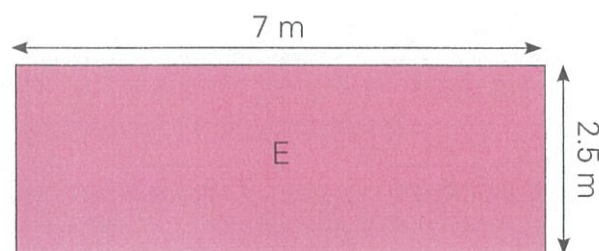
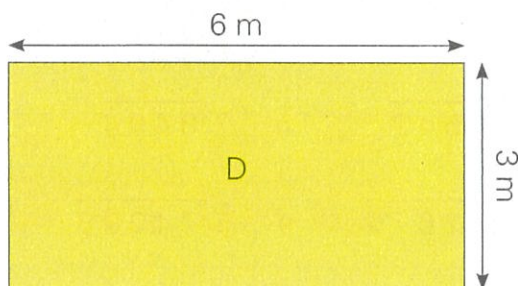
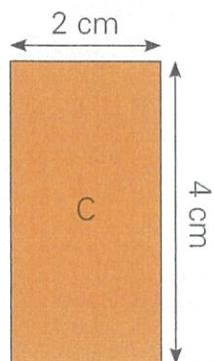
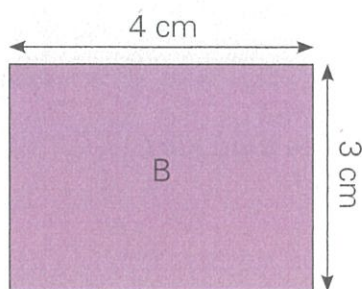
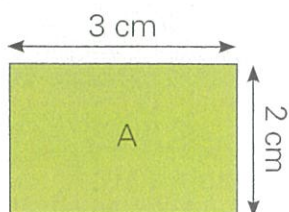
14 Name these shapes, including the full names for the triangles.

a  _____	e  _____	i  _____	m  _____
b  _____	f  _____	j  _____	n  _____
c  _____	g  _____	k  _____	o  _____
d  _____	h  _____	l  _____	p  _____

15 What shape am I?

- I have 3 straight sides. My side lengths are 7 cm, 4 cm and 5 cm. _____
- I have 8 angles the same size and 8 straight sides the same length. _____
- I have 6 straight sides. _____
- I have 10 straight sides the same length and 10 angles the same size. _____

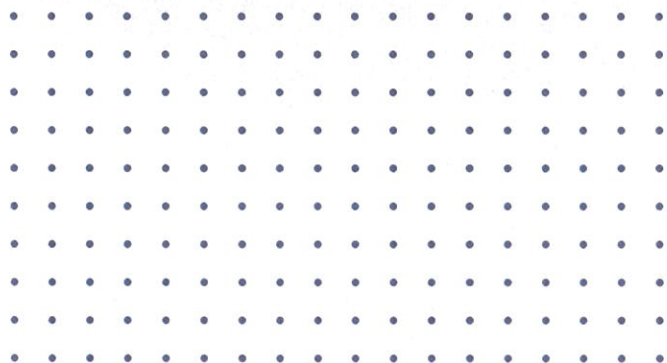
- 19** Use the formula **length × width = area** to find the area of each shape.



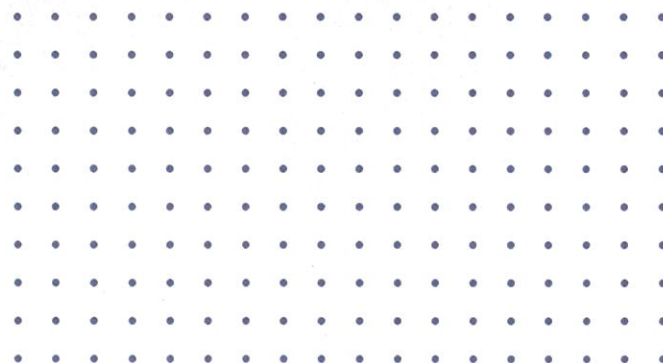
A
B
C
D
E
F

Length	Width	Area
cm	cm	cm ²
cm	cm	cm ²
cm	cm	cm ²
m	m	m ²
m	m	m ²
mm	mm	mm ²

- 20** Draw a rectangle with an area of 24 cm² and a perimeter of 20 cm.



- 21** Draw a rectangle with an area of 35 cm² and a perimeter of 24 cm.



- 22** Calculate the surface area of the paper clips box. You will need to calculate the area of each individual face and total them.

