

Year 6 Maths Home Learning

Week four includes:

- 5 a day – one for each school day (set a timer for between 3 and 5 minutes)
- Maths I do you do – read the power point (40 minutes)
- Practice questions (60 minutes)
- Evidence questions (60 minutes)
- Extension questions – are you up for a challenge? (as long as it takes!)

Name: _____

Primary 5-a-day

Silver



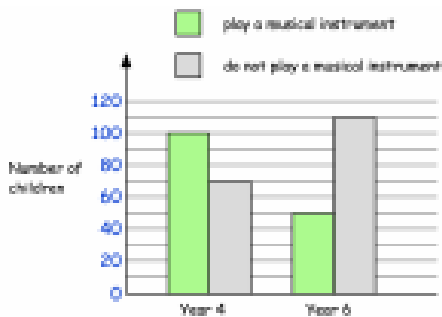
DAY 1

$$606 + 2,525$$

$$\frac{2}{7} + \frac{3}{7}$$

Round 3,541 to the nearest 100

Round 3,541 to the nearest 1,000



How many students are there in **total** in Year 4?

How many **more** Year 4 children than Year 6 children play a musical instrument?

Name: _____

Primary 5-a-day

Silver



DAY 2	
<p>425 – 170</p> <div style="border: 1px solid black; width: 150px; height: 30px; margin: 20px auto;"></div>	<p>8 × 44</p> <div style="border: 1px solid black; width: 150px; height: 30px; margin: 20px auto;"></div>
<p>Arrange these numbers in order, starting with the largest</p> <p>15,123 15,200 15,032 15,103</p>	
<p>Three points are shown on a grid. ABCD is a rectangle.</p> <p>Write down the coordinates of the point D</p>	
<p>Two of the shapes have been shaded so that $\frac{1}{3}$ of the shape is pink.</p> <p>Which shape has not been shaded $\frac{1}{3}$ pink?</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;"> <p>Shape A</p> </div> <div style="text-align: center;"> <p>Shape B</p> </div> <div style="text-align: center;"> <p>Shape C</p> </div> </div>

<p>$\frac{1}{6}$ of 78</p> <div style="border: 1px solid black; width: 150px; height: 40px; margin: 20px auto;"></div>	<p>$4,511 - 1,042$</p> <div style="border: 1px solid black; width: 150px; height: 40px; margin: 20px auto;"></div>										
<p>Draw a right angle</p>											
<p>Work out the difference in height between the tallest and smallest mountains in the table.</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Mountain</th> <th style="padding: 5px;">Height</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Mont Blanc</td> <td style="padding: 5px;">4,809 metres</td> </tr> <tr> <td style="padding: 5px;">Ben Nevis</td> <td style="padding: 5px;">1,334 metres</td> </tr> <tr> <td style="padding: 5px;">Carrauntoohil</td> <td style="padding: 5px;">1,038 metres</td> </tr> <tr> <td style="padding: 5px;">Mount Vancouver</td> <td style="padding: 5px;">4,812 metres</td> </tr> </tbody> </table>	Mountain	Height	Mont Blanc	4,809 metres	Ben Nevis	1,334 metres	Carrauntoohil	1,038 metres	Mount Vancouver	4,812 metres
Mountain	Height										
Mont Blanc	4,809 metres										
Ben Nevis	1,334 metres										
Carrauntoohil	1,038 metres										
Mount Vancouver	4,812 metres										
<p>Ryan has these digit cards.</p> <div style="display: flex; justify-content: center; gap: 10px; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">2</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">6</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">7</div> </div> <p>He makes a 1-digit and a 2-digit number. He multiplies them together and the answer is a multiple of 4.</p>	<p>What could Ryan's multiplication be?</p> <div style="display: flex; align-items: center; justify-content: center; gap: 10px; margin: 10px 0;"> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">□</div> <div style="font-size: 24px;">×</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">□</div> <div style="font-size: 24px;">=</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">□</div> </div>										

Name: _____

Primary 5-a-day

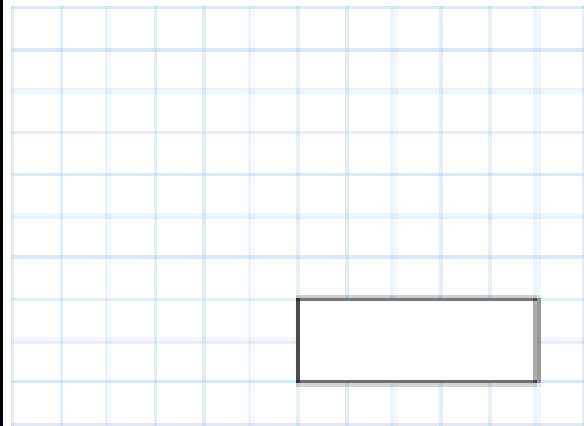
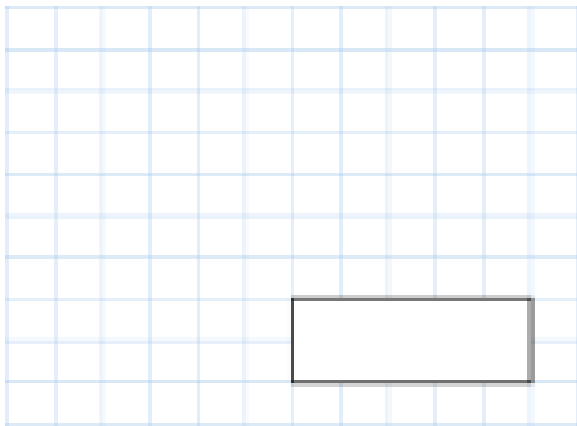
Silver



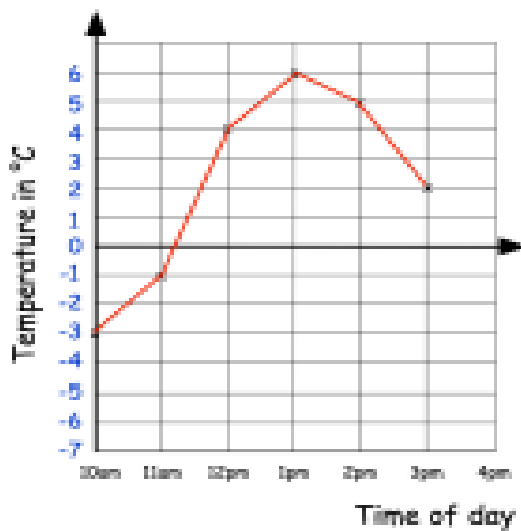
DAY 4											
<p style="font-size: 24px; font-weight: bold; margin-bottom: 10px;">$3.4 + 5.8$</p> <div style="border: 1px solid #ccc; width: 100%; height: 150px; background-color: #e6f2ff; margin-bottom: 10px;"></div> <div style="border: 1px solid #ccc; width: 150px; height: 30px; margin-left: auto; margin-bottom: 10px;"></div>	<p style="font-size: 24px; font-weight: bold; margin-bottom: 10px;">16×100</p> <div style="border: 1px solid #ccc; width: 100%; height: 150px; background-color: #e6f2ff; margin-bottom: 10px;"></div> <div style="border: 1px solid #ccc; width: 150px; height: 30px; margin-left: auto; margin-bottom: 10px;"></div>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; padding: 2px;">Ben</td> <td style="padding: 2px;">○ ○ ○ ○ ◐</td> </tr> <tr> <td style="padding: 2px;">Cano</td> <td style="padding: 2px;">○ ○</td> </tr> <tr> <td style="padding: 2px;">Dylan</td> <td style="padding: 2px;">○ ○ ◐</td> </tr> <tr> <td style="padding: 2px;">Elke</td> <td style="padding: 2px;">○ ○ ○ ○ ○</td> </tr> </table> <p style="text-align: right; margin-top: 5px;">Key ○ = £30</p>	Ben	○ ○ ○ ○ ◐	Cano	○ ○	Dylan	○ ○ ◐	Elke	○ ○ ○ ○ ○	<p>How much money does Dylan have?</p>		
Ben	○ ○ ○ ○ ◐										
Cano	○ ○										
Dylan	○ ○ ◐										
Elke	○ ○ ○ ○ ○										
<p>Super Bowl LII will take place in 2018.</p> <p>Write LII in figures</p>											
<p>The numbers in this sequence increase by the same amount each time.</p> <p>Find the missing numbers</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid #ccc; width: 40px; height: 25px; display: inline-block;"></div> 73 88 <div style="border: 1px solid #ccc; width: 40px; height: 25px; display: inline-block;"></div> 118 </div>										

= 2,300 + 900

9×62



A song lasts 3 minutes 37 seconds.
How long does the song last in seconds?



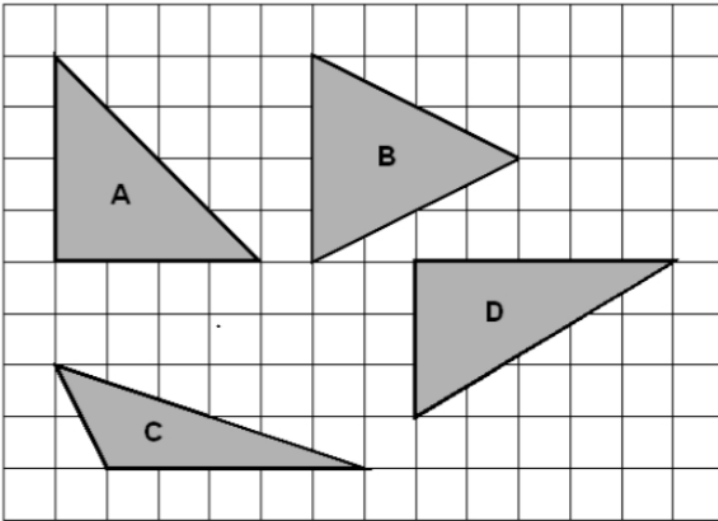
How many degrees warmer was it at 1pm than at 11am?

At 4pm the temperature was 5 degrees lower than at 3pm.

What was the temperature at 4pm?

Year 6: Angles Practise Questions

Practise 1



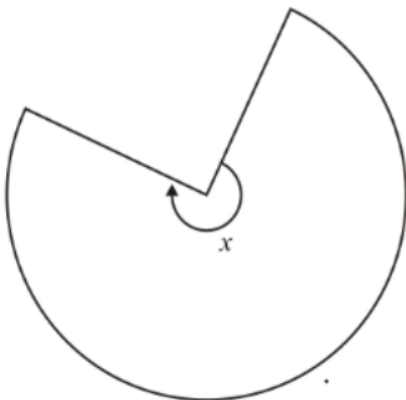
Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.

	has a right angle	has an obtuse angle	has 3 acute angles
is isosceles	A		
is not isosceles			

Practise 2

This shape is **three-quarters** of a circle.



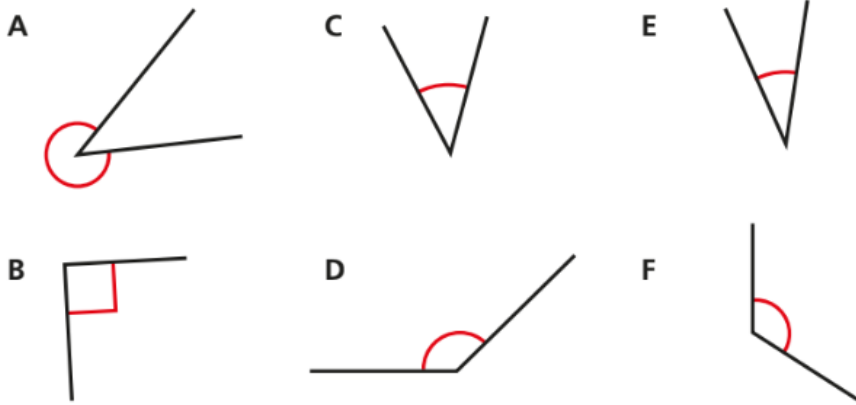
How many degrees is **angle x**?

Practise 3—EXPLAIN

True or False?

A triangle can never have 3 acute angles.

Here are some angles.

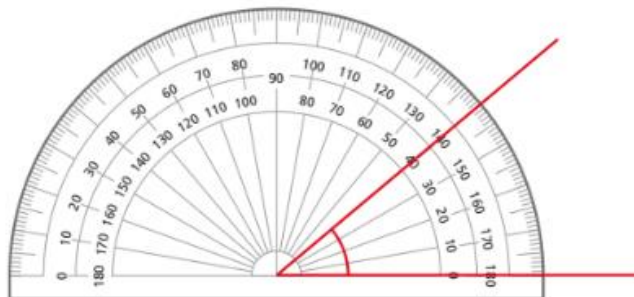


a) Sort the angles into the table.

Acute angle	Obtuse angle	Right angle	Reflex angle

2 What is the size of each angle? Circle your answer.

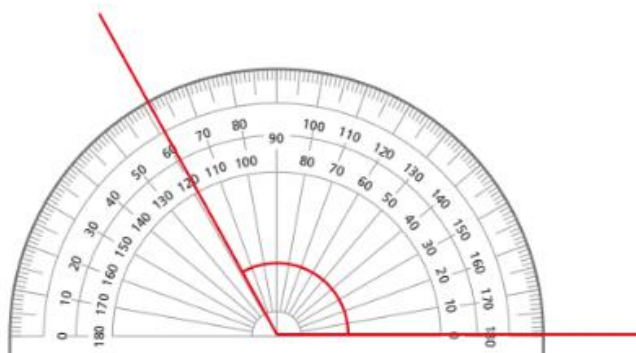
a)



40°

140°

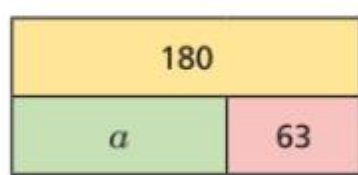
b)



61°

119°

- 2 a) Complete the fact family for the bar model.



$$a + 63 = \square$$

$$180 - \square = a$$

$$63 + \square = \square$$

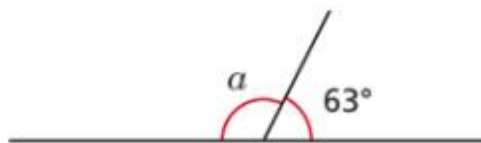
$$180 - a = \square$$

- b) Tick the calculation in part a) that helps you work out the value of a .

- c) Work out the value of a .

$$a = \square$$

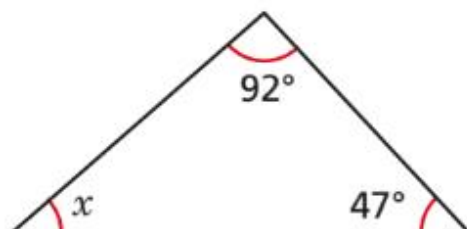
- d) How does the bar model help you to calculate angle a ?



- 2 Work out the sizes of the unknown angles.

Give reasons for your answers.

- a)



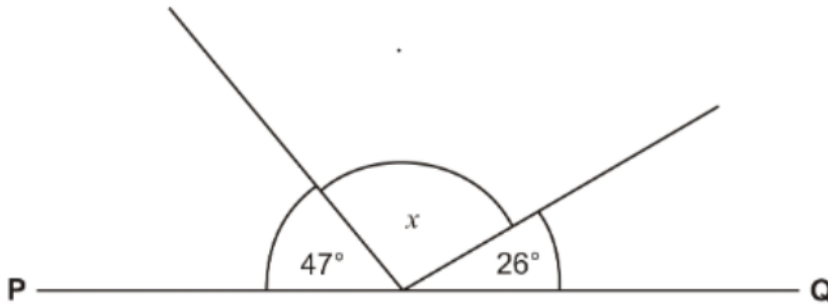
$$x = \square \text{ because } \underline{\hspace{2cm}}$$

Year 6: Angles evidence Questions

ARE 1

PQ is a straight line.

Not drawn accurately



Calculate the size of angle x .

ARE 3

Jamie draws a triangle.

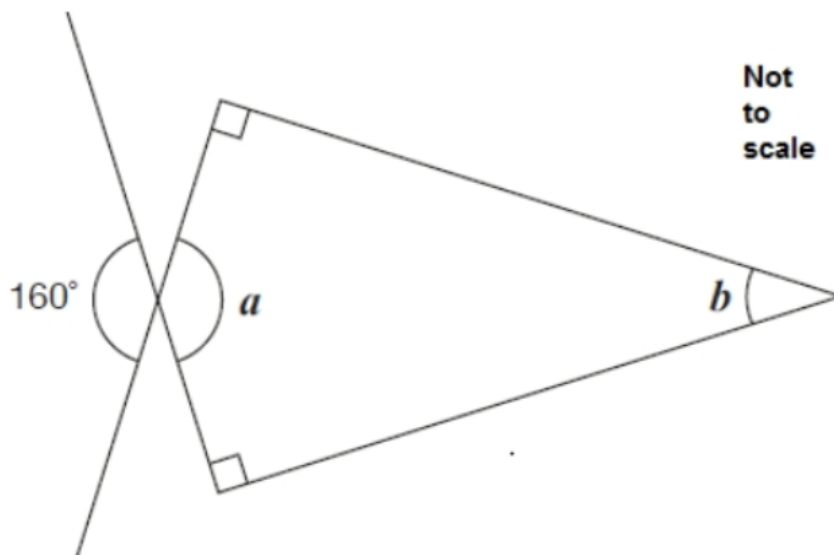
He says,

'Two of the three angles in my triangle are obtuse'.

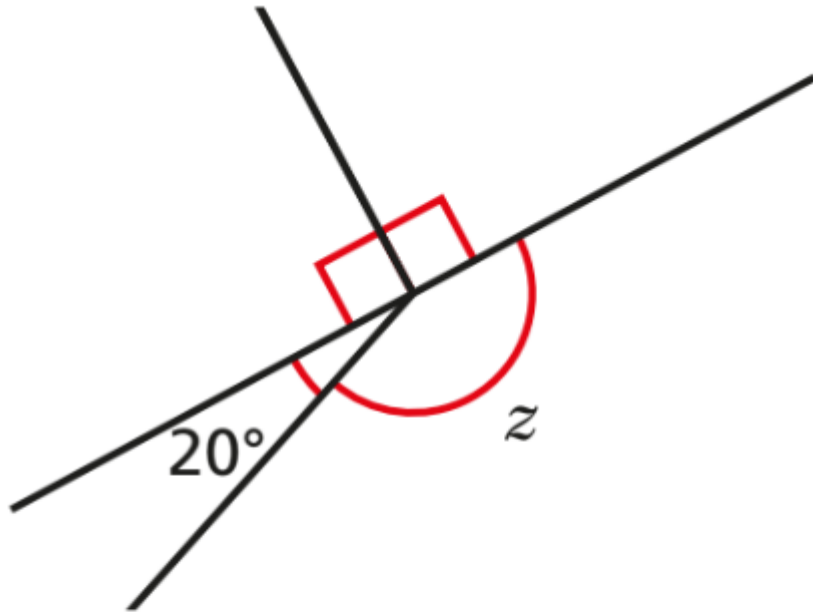
Explain why Jamie **cannot** be correct.

ARE 6

Calculate the size of angles a and b in this diagram.

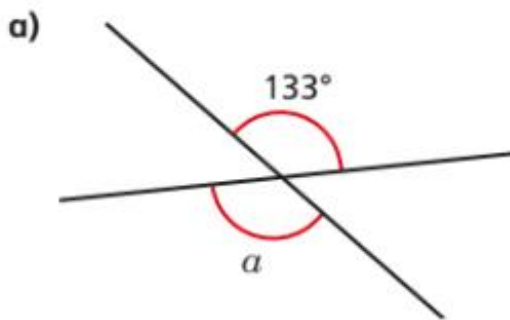


Not
to
scale

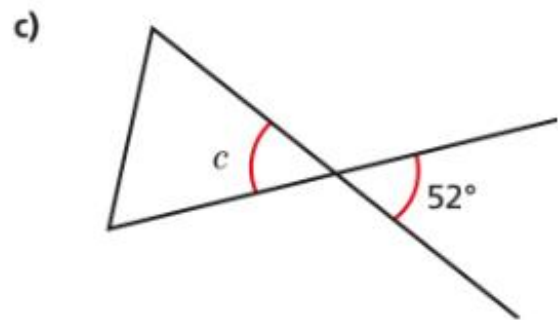


$$z = \boxed{}$$

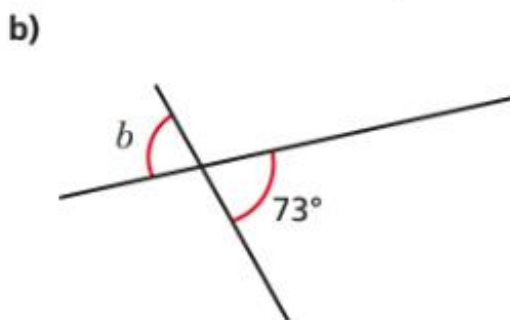
5 Work out the unknown angles.



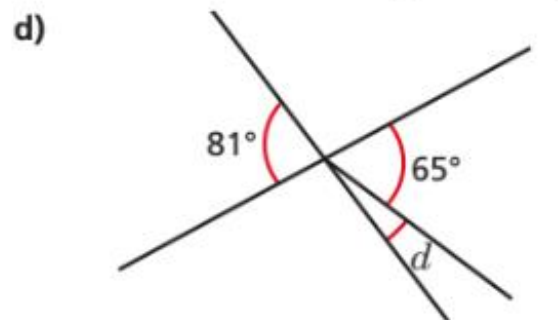
$$a = \boxed{}$$



$$c = \boxed{}$$

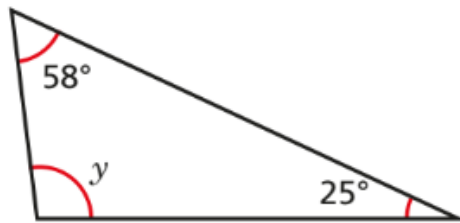


$$b = \boxed{}$$



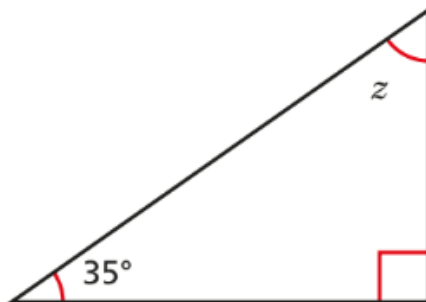
$$d = \boxed{}$$

b)



$y =$ because _____

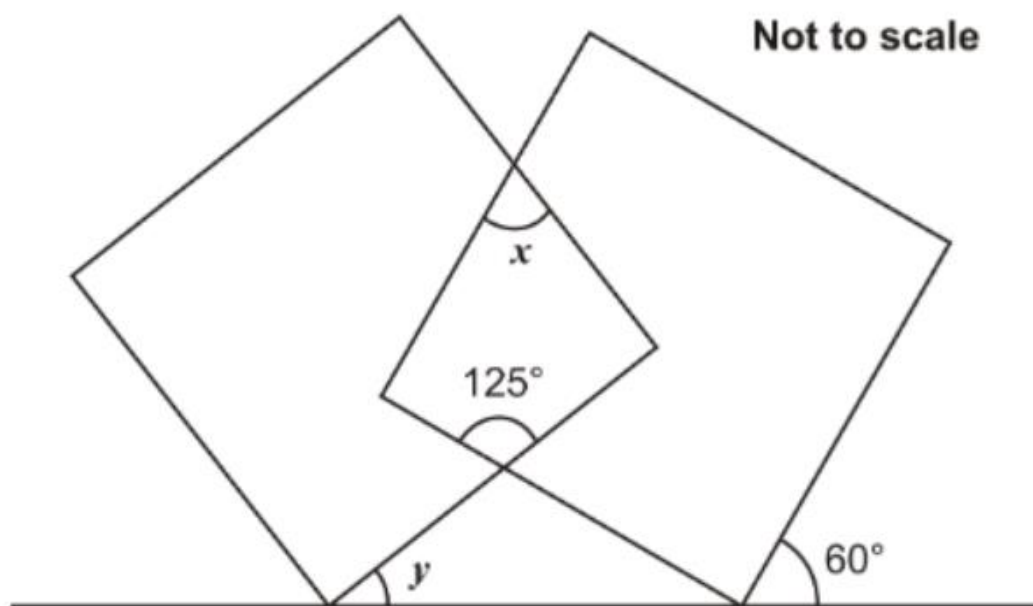
c)



$z =$ because _____

ARE 8

The diagram shows two overlapping squares and a straight line.

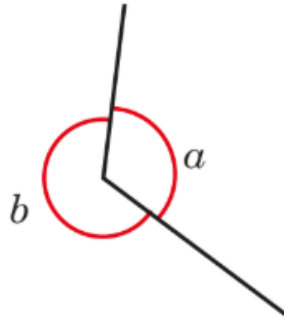


Calculate the value of **angle x** and the value of **angle y** .

Year 6: Angles extension Questions

7 Use the information to work out the unknown angles.

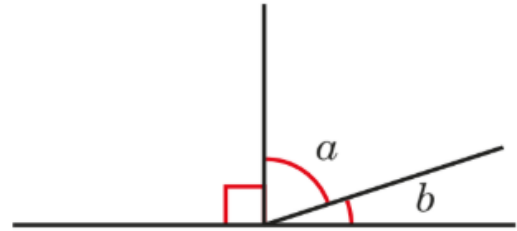
a) Angle a is half the size of angle b .



$$a = \boxed{}$$

$$b = \boxed{}$$

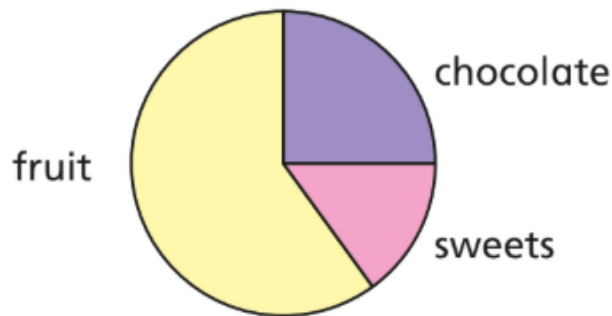
b) Angle a is four times the size of angle b .



$$a = \boxed{}$$

$$b = \boxed{}$$

8 The pie chart shows some children's favourite snacks.



A quarter of the children said chocolate was their favourite snack.

Five times as many children voted for fruit as voted for sweets.

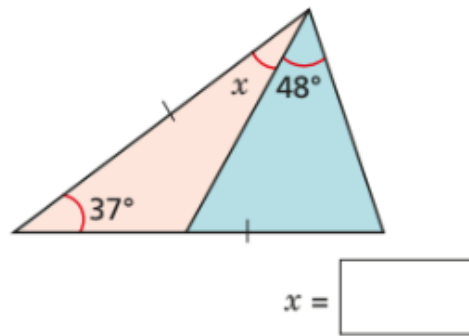
Work out the size of the angle for each sector in the pie chart.

chocolate

sweets

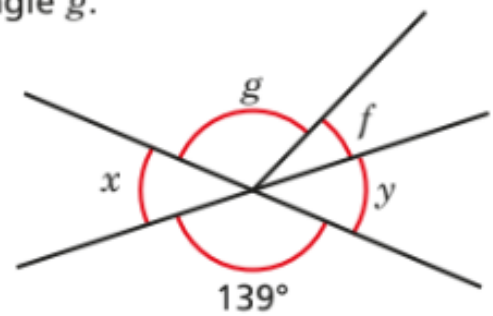
fruit

- 5 Work out the size of angle x .



- 7 Angle f is one quarter of the size of angle g .

Angle f is 28° .



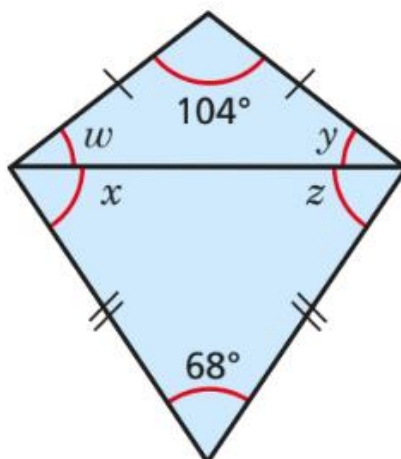
Are angles x and y vertically opposite? _____

Explain your answer.

5

Two isosceles triangles are joined to form a kite.

a) Work out the sizes of the unknown angles.



$w = \boxed{}$

$y = \boxed{}$

$x = \boxed{}$

$z = \boxed{}$

b) Work out $w + x$.

c) Work out $y + z$.

What do you notice? Talk about it with a partner.