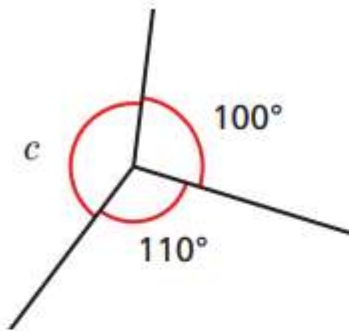


MONDAY

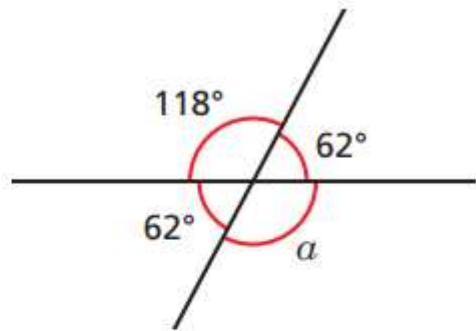
Work out the unknown angles.

a)



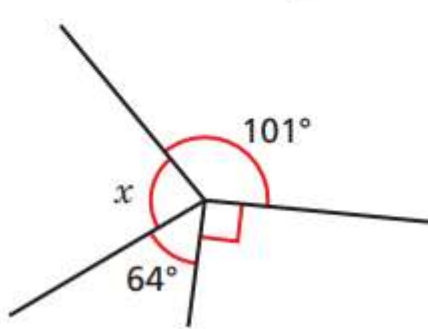
$c =$

c)



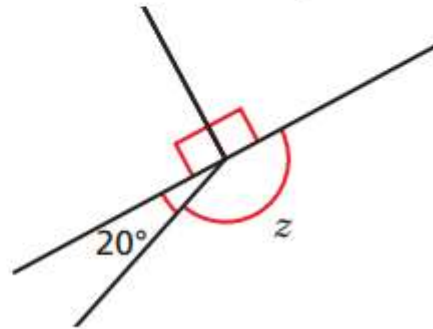
$a =$

b)



$x =$

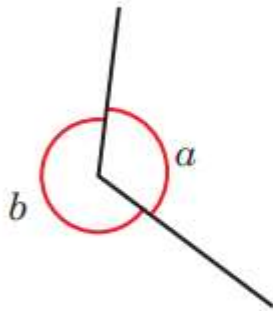
d)



$z =$

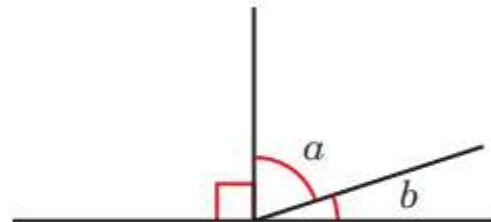
Use the information to work out the unknown angles.

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



$$a = \boxed{\phantom{00}}$$
$$b = \boxed{\phantom{00}}$$

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



$$a = \boxed{\phantom{00}}$$
$$b = \boxed{\phantom{00}}$$

8b. Use the hints to work out the angles.

Five angles make up a full turn.

Angle A is three-quarters of the full turn.

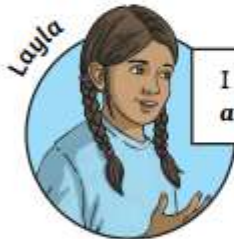
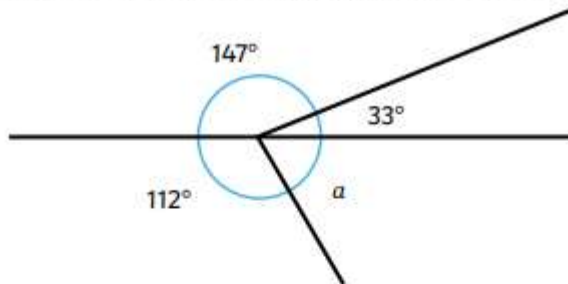
Angle B is one-tenth of the full turn.

Angle C is half of angle D and together they equal  $30^\circ$ .

Angle E is a multiple of 12.

What are the 5 angles?

Two children are calculating the value of angle  $a$ .



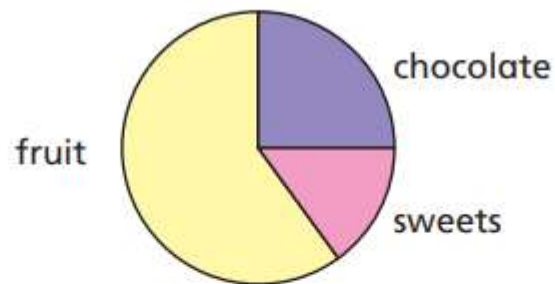
I calculated that angle  $a$  has a value of  $66^\circ$ .



I do not agree with Layla. I think angle  $a$  has a value of  $68^\circ$ .

Who is correct? Explain your reasoning.

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

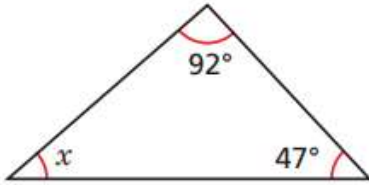
sweets

fruit

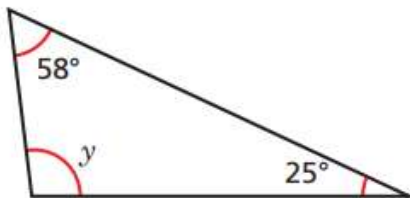
TUESDAY

Calculate the missing angles and show your method

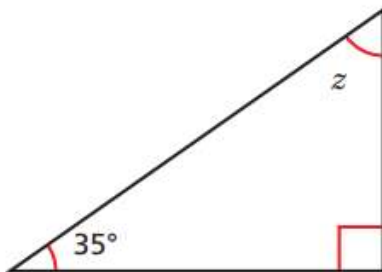
a)



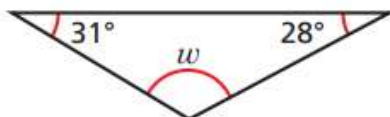
b)

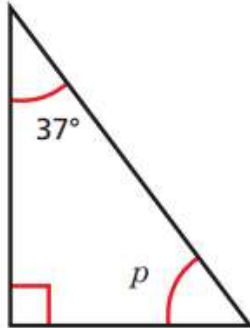


c)



d)





$p = 143^\circ$  because angles in a triangle sum to  $180^\circ$  and  $180 - 37 = 143$



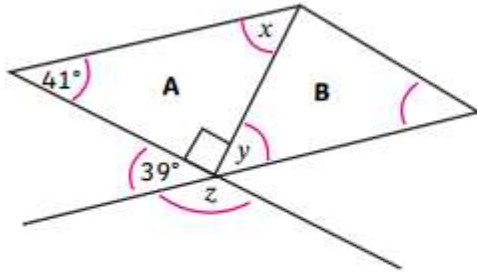
Do you agree with Ron? \_\_\_\_\_

Explain your answer.

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True or false? Explain how you know.



Important note: triangles are not drawn to scale, do not use a protractor.

a) Angle y will measure  $39^\circ$  as it is vertically opposite the angle measuring  $39^\circ$ .

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b) To find angle x, subtract  $41^\circ$  and the value of a right angle from  $180^\circ$ .

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c) As angle z is one of 5 angles around a point, you can calculate angle z by dividing  $360^\circ$  by 5.

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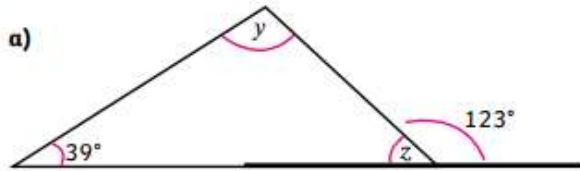
d) Find the missing angles x, y and z.

angle x = \_\_\_\_\_ angle y = \_\_\_\_\_ angle z = \_\_\_\_\_



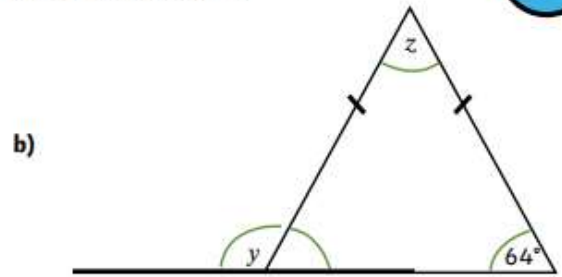


1) For each question, calculate the value of the angles  $y$  and  $z$ . Think carefully about what you know about angles around a point, on a straight line and in different types of triangles.



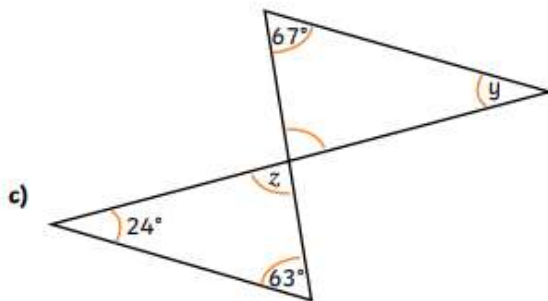
angle  $y$  = \_\_\_\_\_

angle  $z$  = \_\_\_\_\_



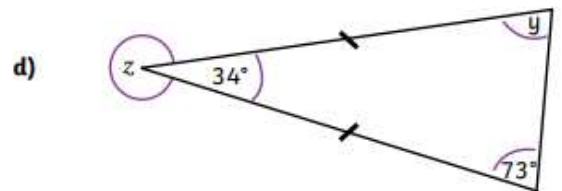
angle  $y$  = \_\_\_\_\_

angle  $z$  = \_\_\_\_\_



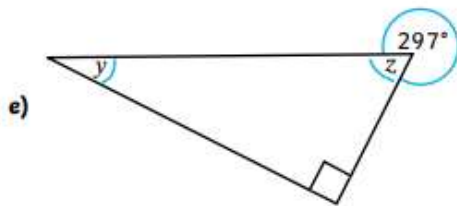
angle  $y$  = \_\_\_\_\_

angle  $z$  = \_\_\_\_\_



angle  $y$  = \_\_\_\_\_

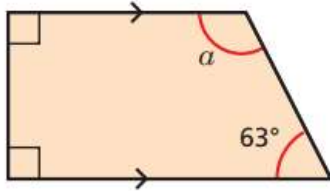
angle  $z$  = \_\_\_\_\_



WEDNESDAY

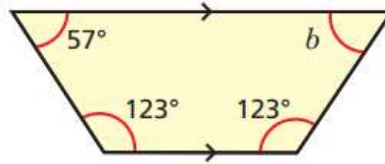
Work out the size of the unknown angle in each trapezium.

a)



$$a = \boxed{\phantom{000}}$$

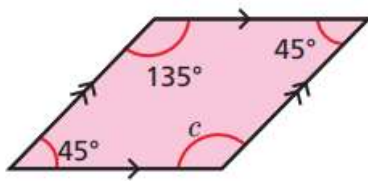
b)



$$b = \boxed{\phantom{000}}$$

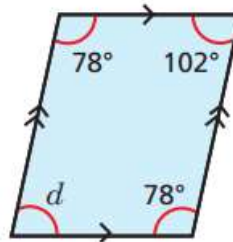
Work out the sizes of the unknown angles.

a)



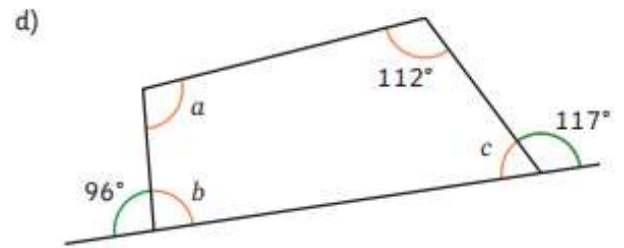
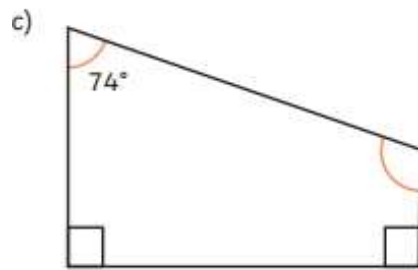
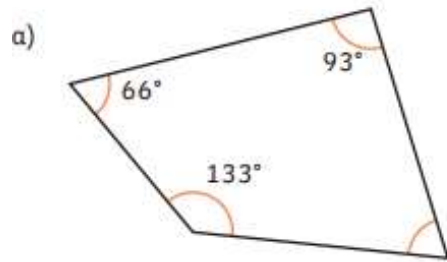
$$c = \boxed{\phantom{000}}$$

b)

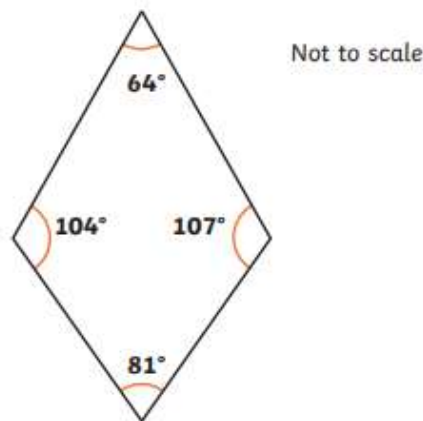


$$d = \boxed{\phantom{000}}$$

Calculate and label the missing angles in each of these quadrilaterals.



Monika measured the angles in this kite shape with a protractor and labelled it with the angles she found.

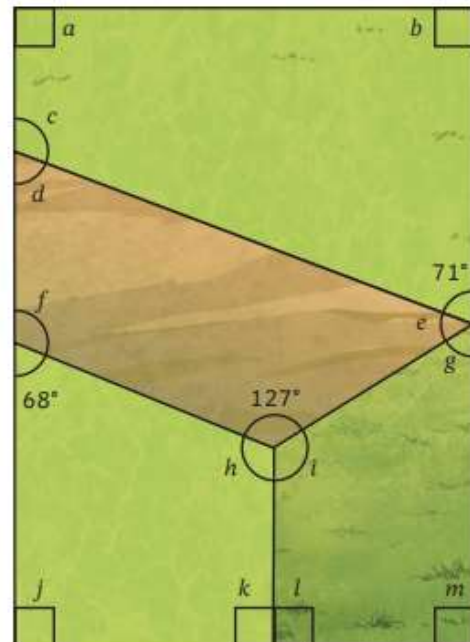


Leo says, "Without measuring the angles myself, I think I have found two reasons to prove Monika hasn't measured the angles correctly."

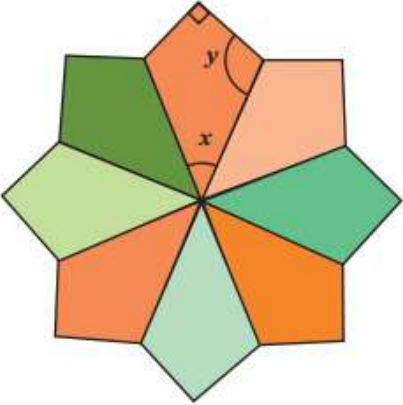
Which two reasons do you think Leo has found to explain how he knows that Monika has not measured the angles correctly in the kite? Explain your answer fully.

A gardener is splitting his garden up into differently sized plots of land using fences. Calculate the value of all of the missing angles to show the gardener at what angle each of his fences needs to be put up to split the land correctly.

$a =$	$f =$	$k =$
$b =$	$g =$	$l =$
$c =$	$h =$	$m =$
$d =$	$i =$	
$e =$	$j =$	



This tessellating picture is made from kite quadrilateral shapes.  
Calculate the value of angles  $x$  and  $y$ . Explain how you worked each angle out.



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