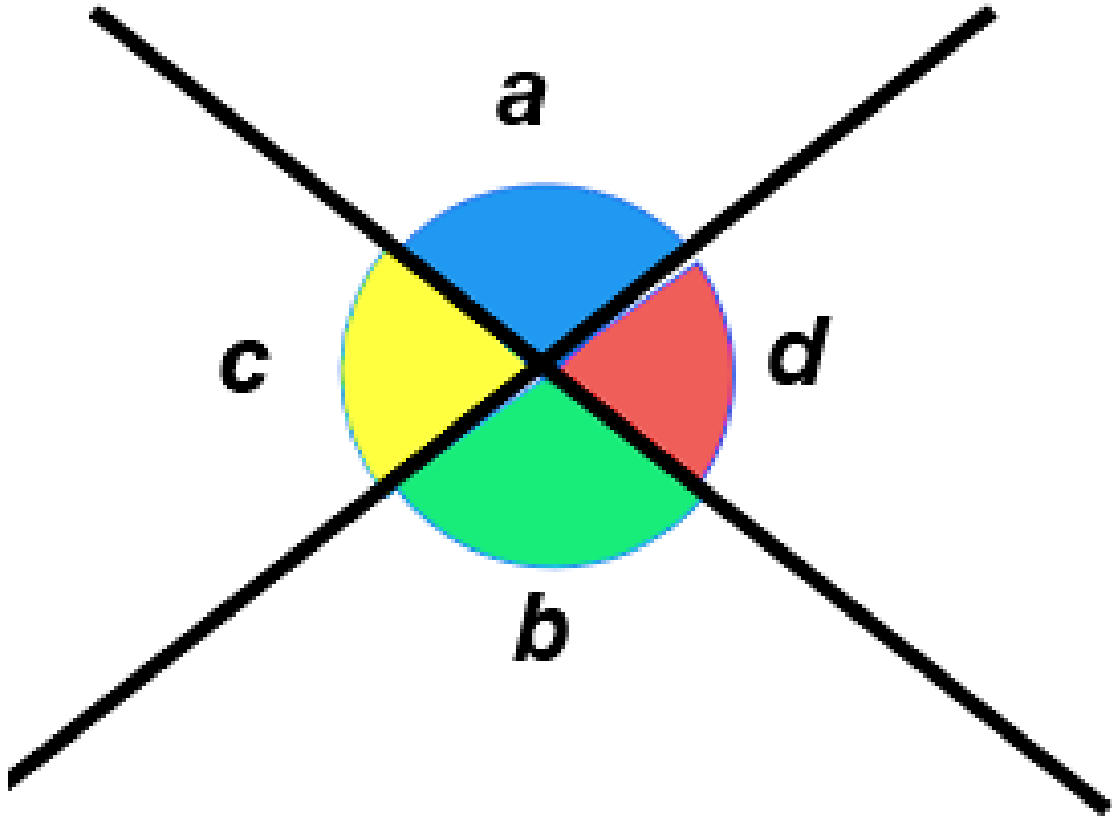


Lesson 4

L.O: I am learning to calculate vertically opposite angles.



Starter



Complete the sentences
below with the
corresponding letters:
(ex.) $a = b$

$__ = d$

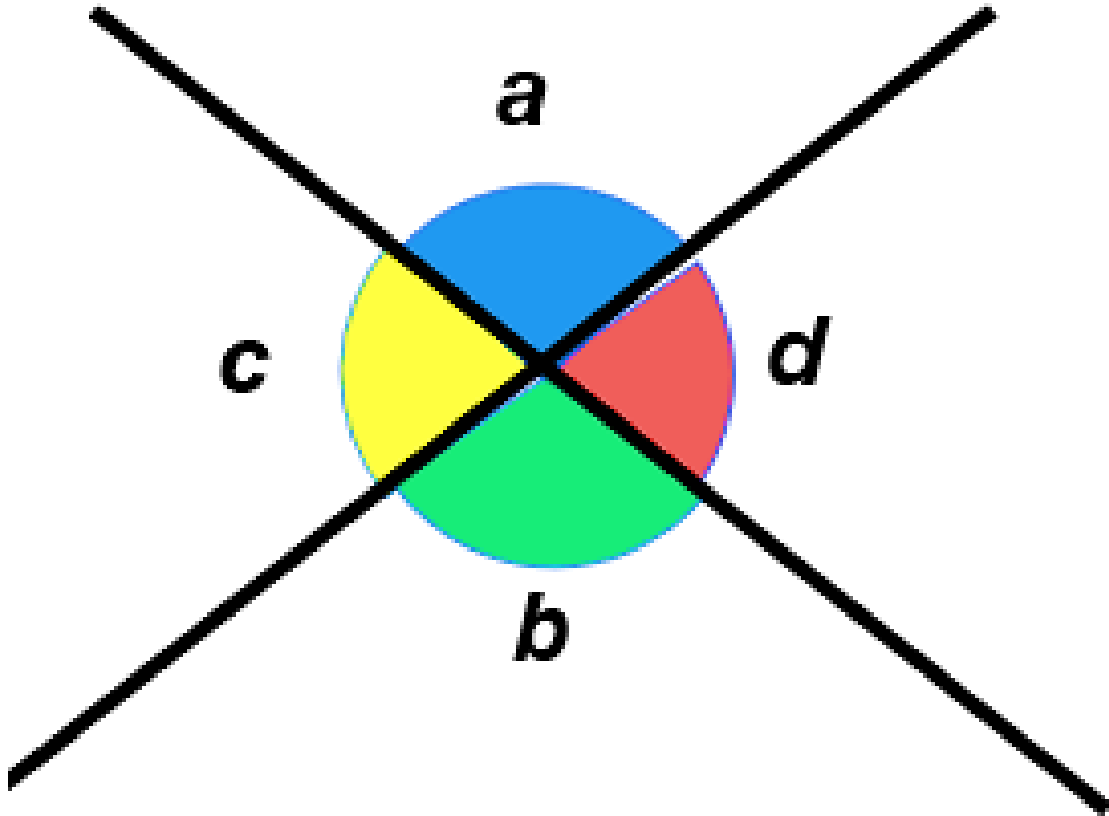
$__ + c = 180^\circ$

$__ + b = 180^\circ$



ANSWERS: Starter

Complete the sentences below with the corresponding letters:
(ex.) $a = b$



$$c = d$$

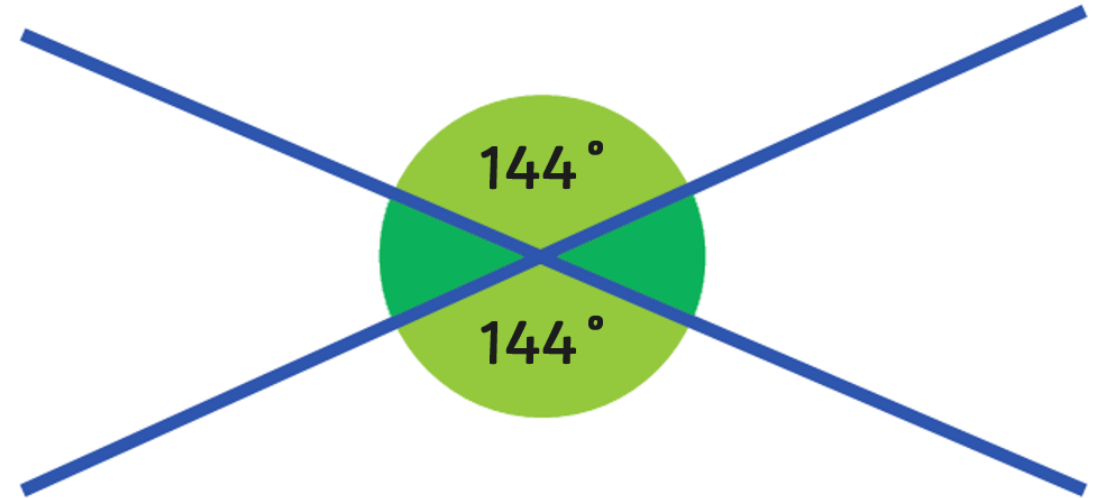
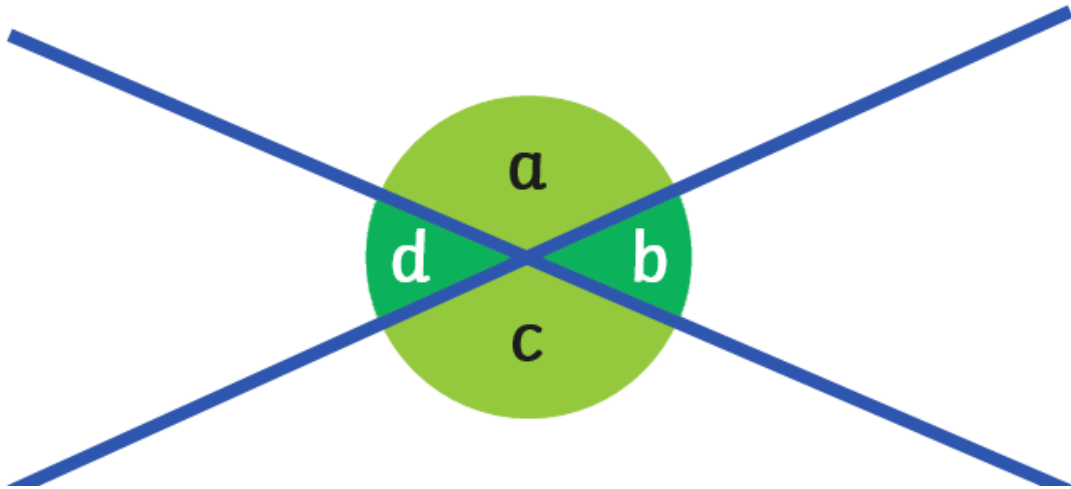
$$a + c \text{ (or } d) = 180^\circ$$

$$d \text{ (or } c) + b = 180^\circ$$

Vertically opposite angles

When two straight lines intersect (cross each other), four angles are created around a point which total 360° .

The pairs of angles that are opposite each other measure the same number of degrees and are equal (congruent).

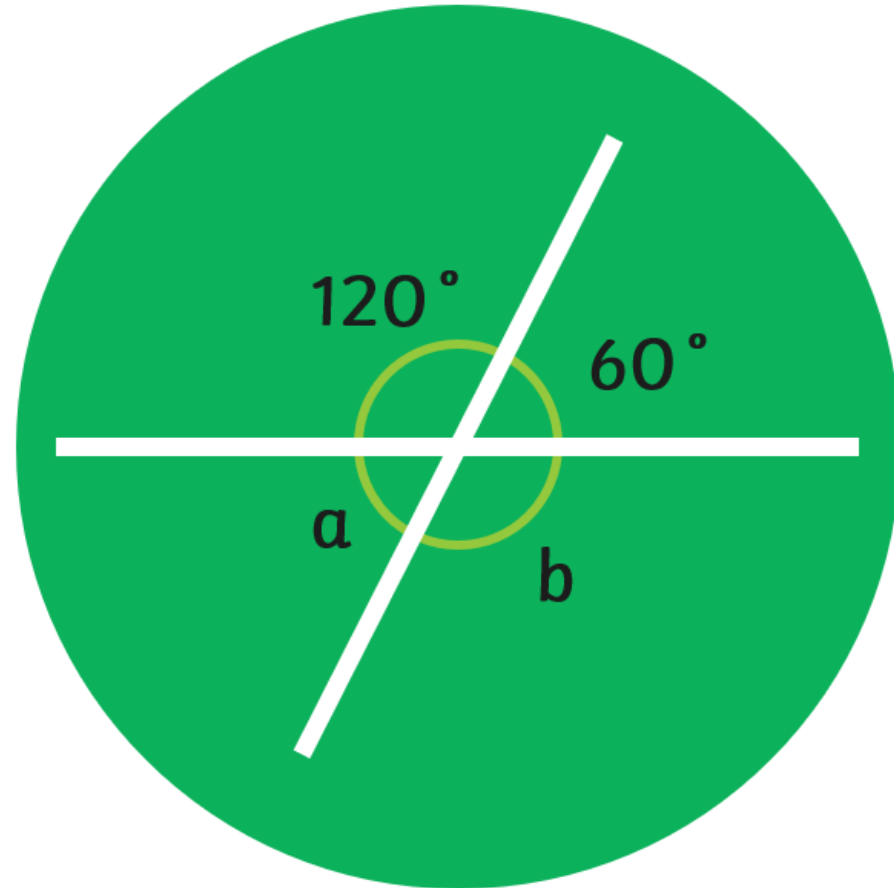
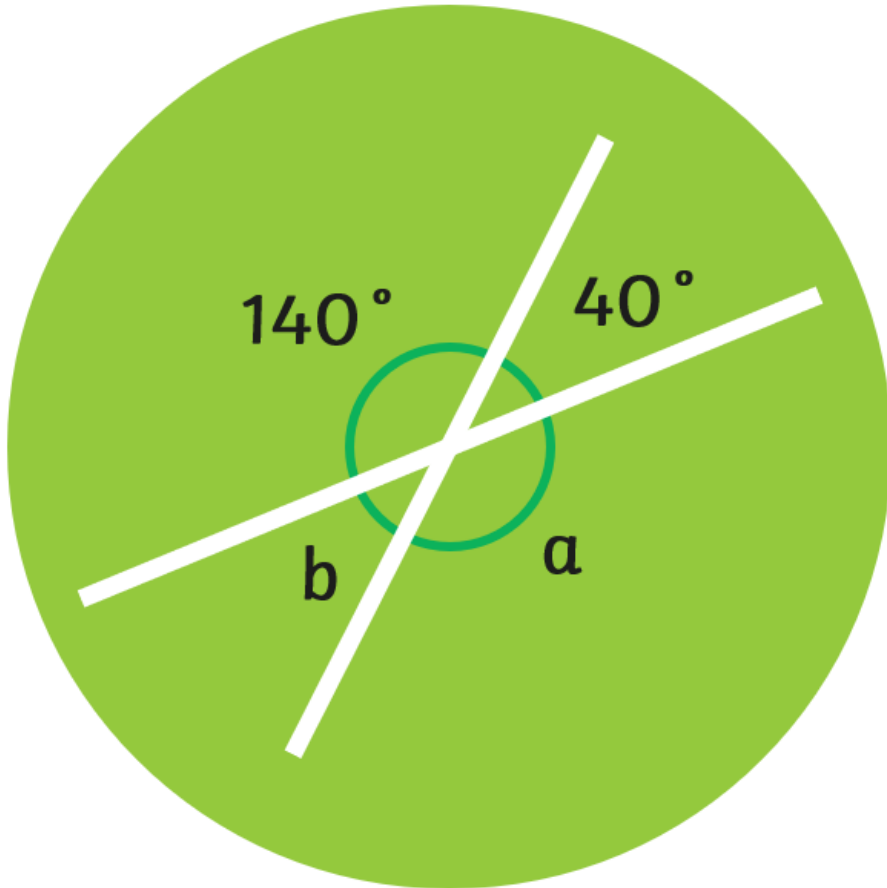


These pairs of angles are called **vertically opposite angles**.



Vertically opposite angles

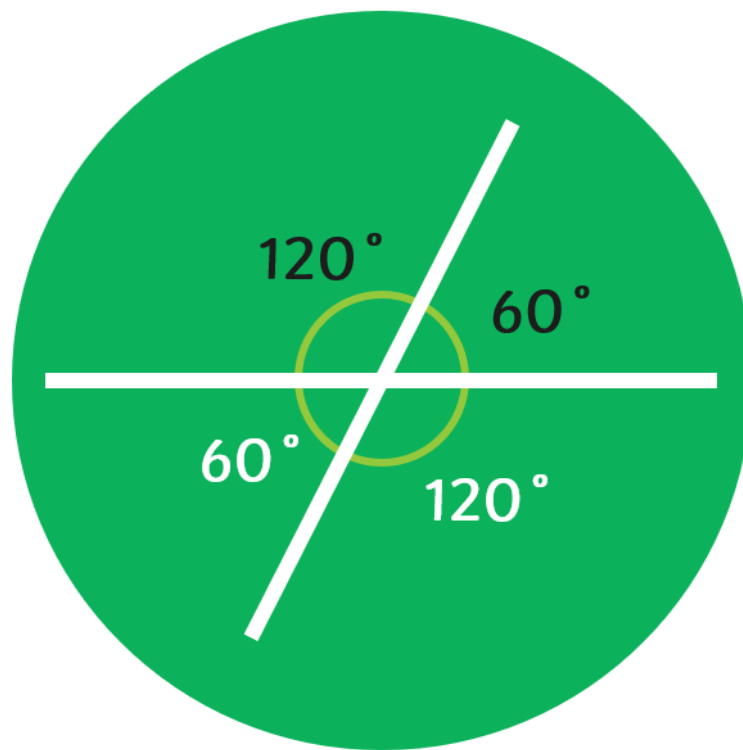
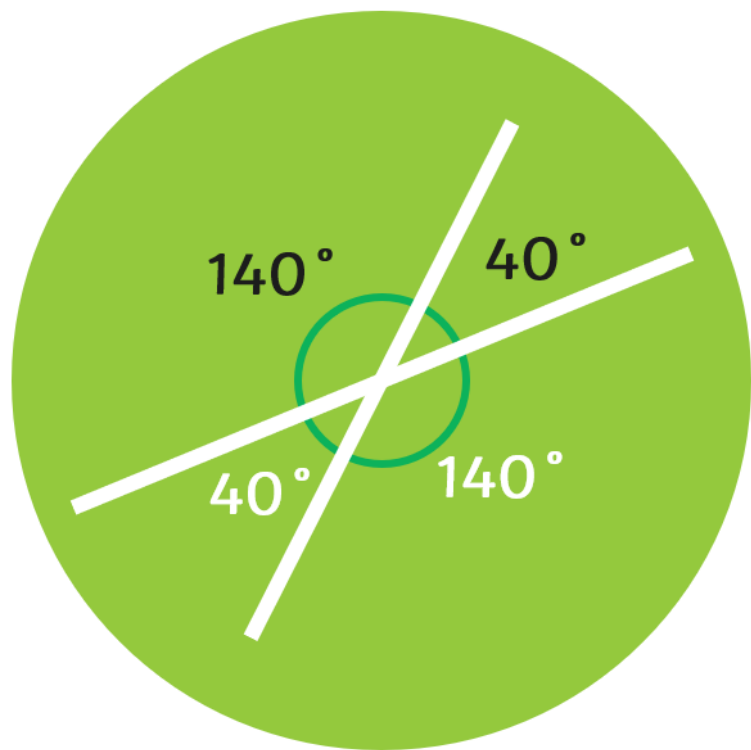
Identify these missing angles using vertically opposite angle facts:





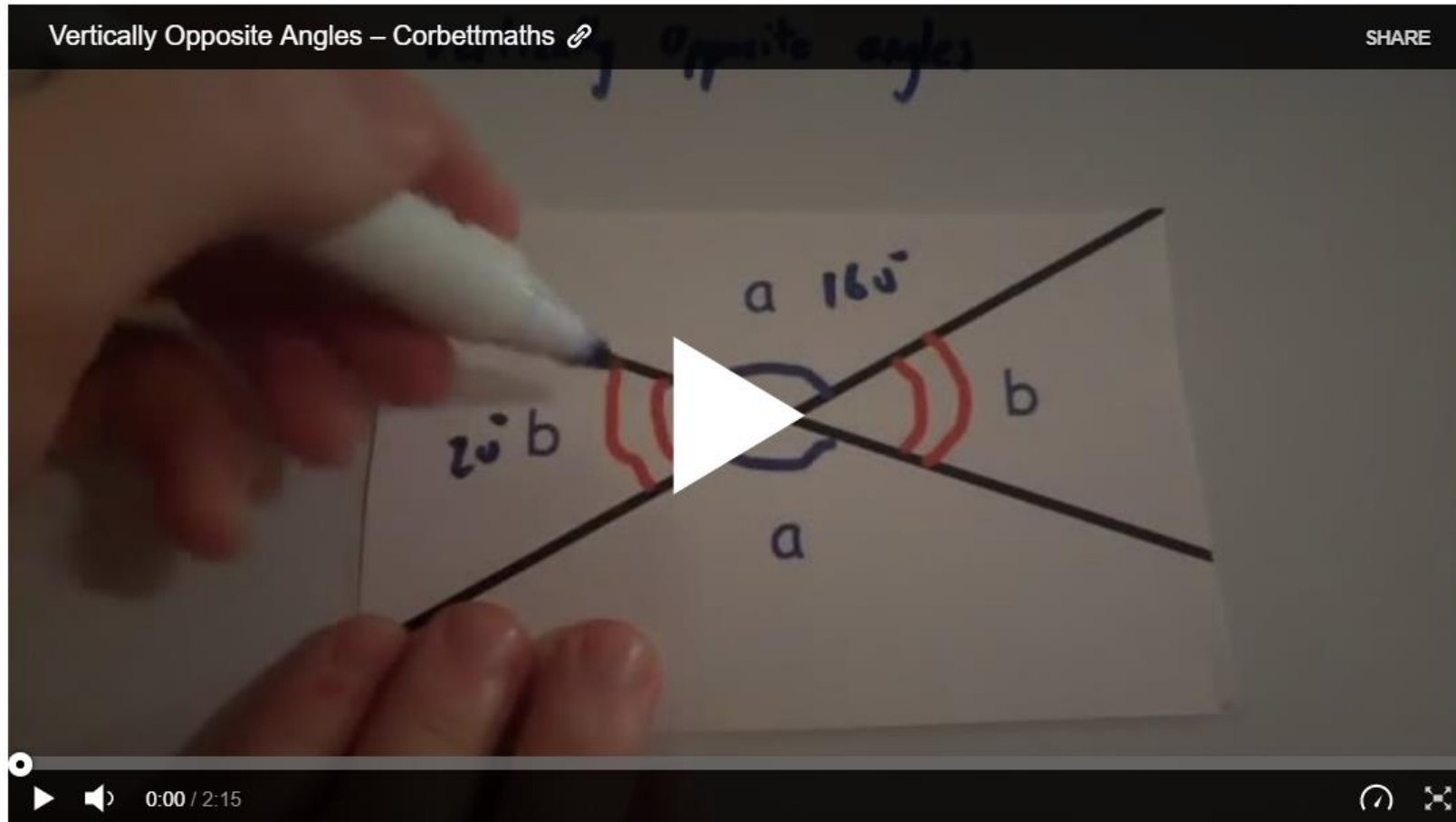
ANSWERS: Vertically opposite angles

Identify these missing angles using vertically opposite angle facts:



Have you noticed that adjacent angles are on a straight line and total 180° ?

A helpful video

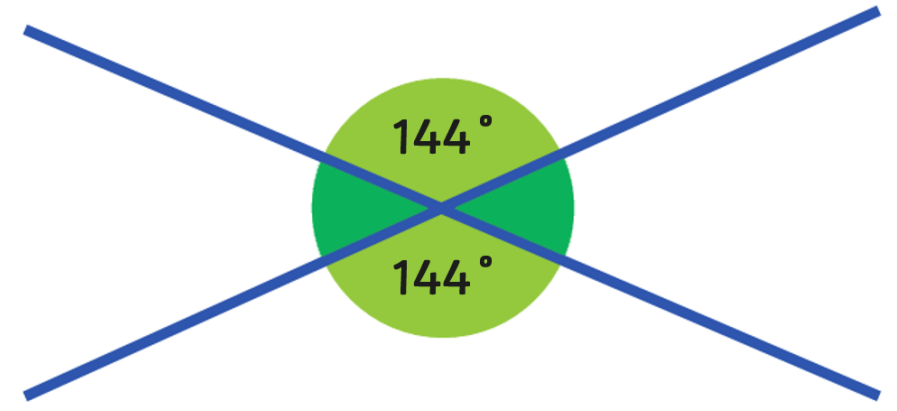
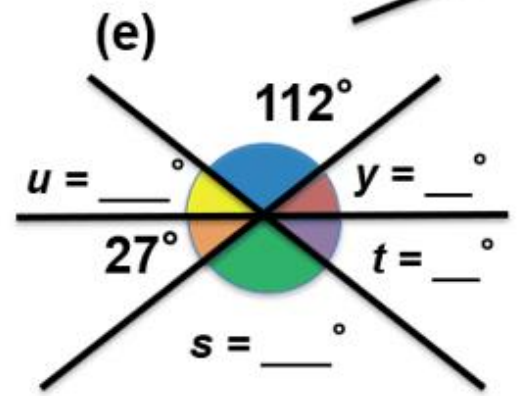
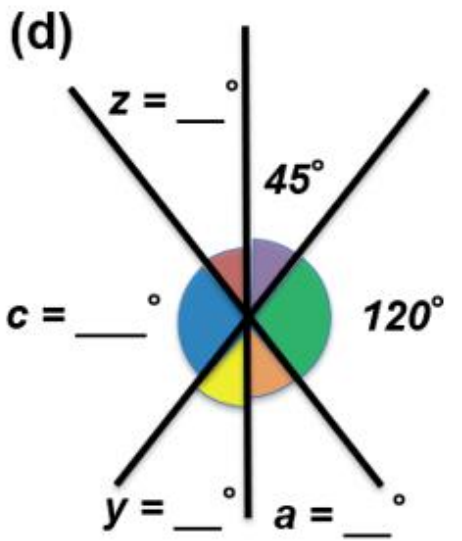
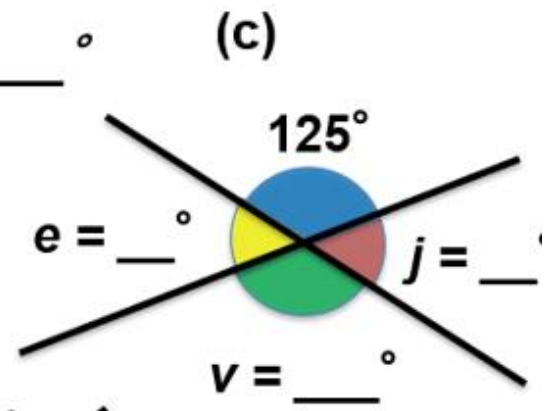
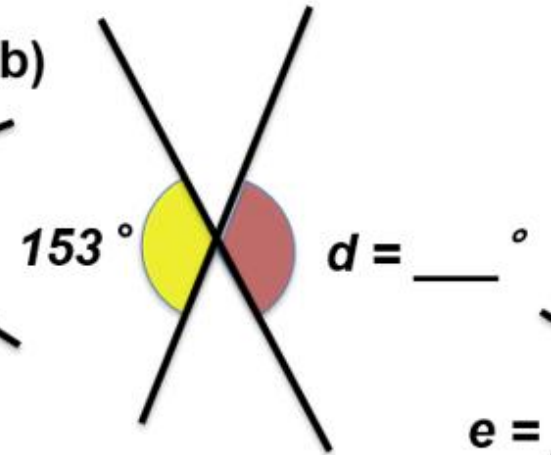
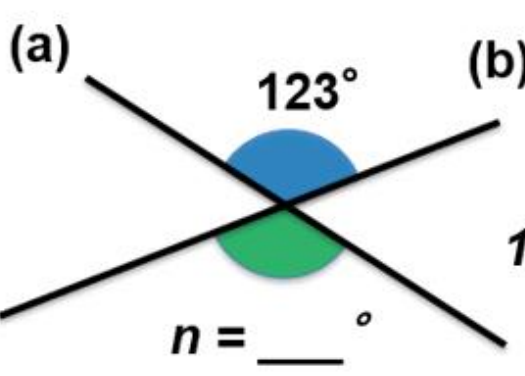


<https://corbettmaths.com/2013/03/16/vertically-opposite-angles/>



Vertically opposite angles

The pairs of angles that are opposite each other measure the same number of degrees and are equal (congruent).



These pairs of angles are called vertically opposite angles.

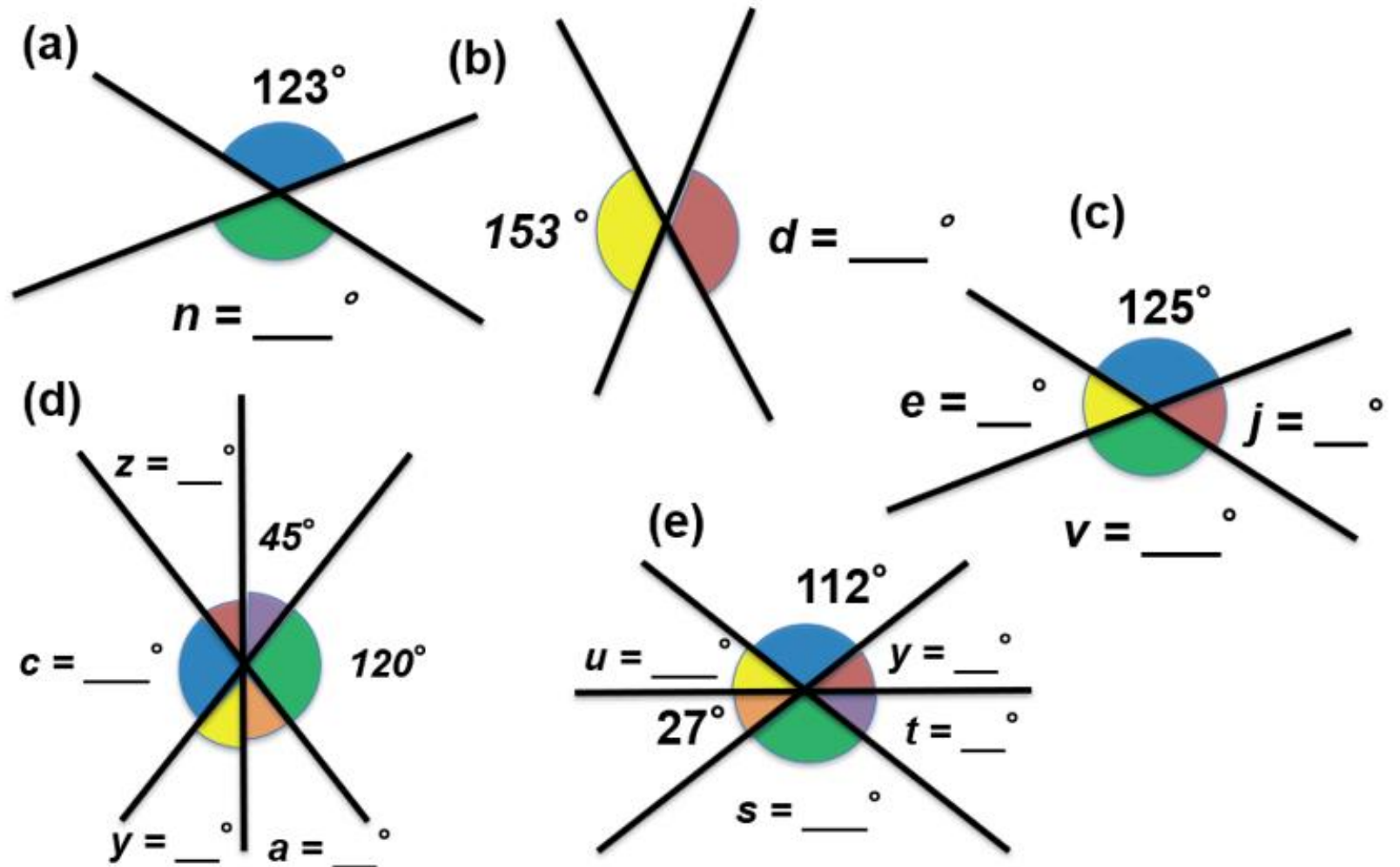
Remember opposite angles are equal!



ANSWERS: Vertically opposite angles

How well did you do?

If you made any mistakes can you see where you made them?



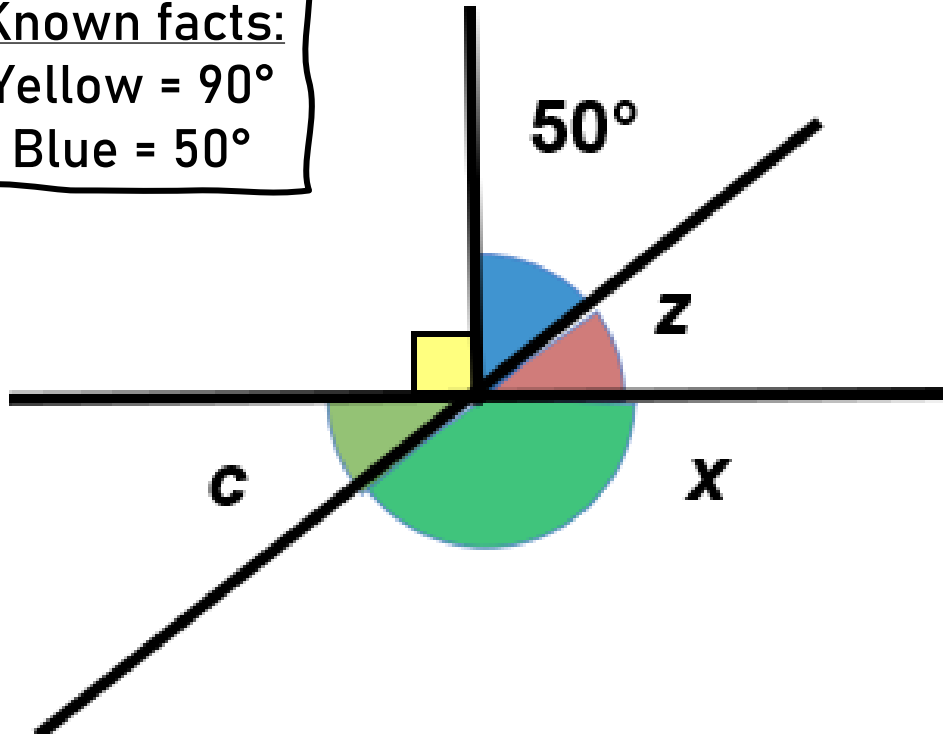
Worked example



Known facts:

$$\text{Yellow} = 90^\circ$$

$$\text{Blue} = 50^\circ$$



$$\text{Yellow} + \text{blue} + Z = 180^\circ$$

$$\text{Yellow} + \text{blue} = 140^\circ$$

$$Z = 180^\circ - 140^\circ$$

$$Z = 40^\circ$$

C is vertically opposite to Z

$$C = 40^\circ$$

$$X + C = 180^\circ$$

$$180^\circ - C (40^\circ) = 140^\circ$$

$$X = 140^\circ$$

Answers

$$\text{Yellow} = 90^\circ$$


$$\text{Blue} = 50^\circ$$

$$Z = 40^\circ$$

$$C = 40^\circ$$

$$X = 140^\circ$$

Once you have finished turn this assignment in on Google Classroom.



Task

All	All of you must complete the fluency section.
Most	Most of you will complete the fluency and reasoning sections.
Some	Some of you will complete the fluency, reasoning, and problem-solving sections.

Try your best – it is all we can ask for! 😊

This video may help if you are stuck at any point:
<https://corbettmaths.com/2013/03/16/vertically-opposite-angles/>

Week 1_Maths_Lesson 4

Lesson 4

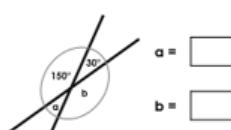
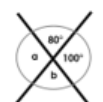
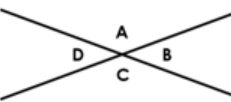
L.O I am learning to calculate vertically opposite angles.

All	All of you must complete the fluency section.
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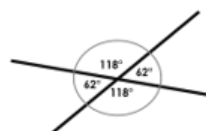
This video may help if you are stuck at any point:
<https://corbettmaths.com/2013/03/16/vertically-opposite-angles/>

Fluency


Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>1b. Calculate the missing angles.</p>  <p>a = <input type="text"/></p> <p>b = <input type="text"/></p>	
<p>2b. Complete the statement.</p>  <p>$80^\circ + 100^\circ + a + b =$ <input type="text"/></p> <p>Which angles are equal? Which angles total 180 degrees?</p> 	


Week 1_Maths_Lesson 4

7a. Which angles total 180°?

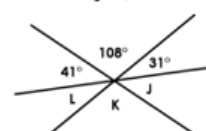


Work out the unknown angles.

e)  a =

d)  c =

Find angles J, K and L.



Find angles M, N, O and P.

