

Lesson 4

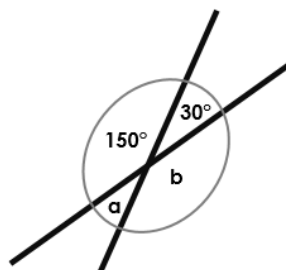
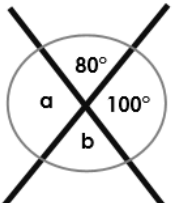
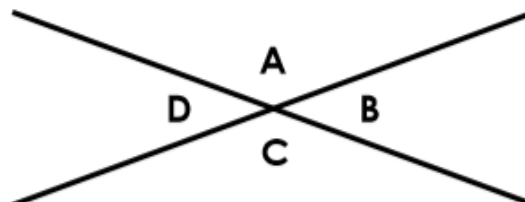
L.0 I am learning to calculate vertically opposite angles.

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.

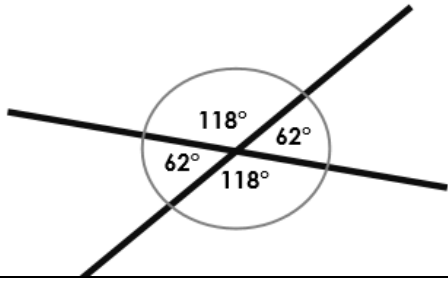
Try your best – it is all we can ask for! 😊

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

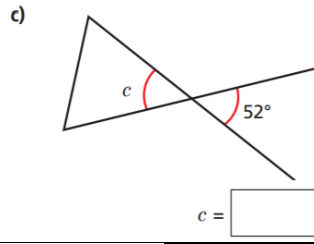
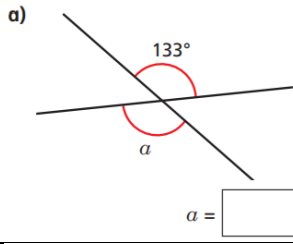
Fluency

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>1b. Calculate the missing angles.</p>  <p style="margin-left: 200px;">a = <input type="text"/></p> <p style="margin-left: 200px;">b = <input type="text"/></p>	
<p>2b. Complete the statement.</p>  <p style="margin-left: 100px;">$80^\circ + 100^\circ + a + b =$ <input type="text"/></p>	
<p>Which angles are equal? Which angles total 180 degrees?</p> 	

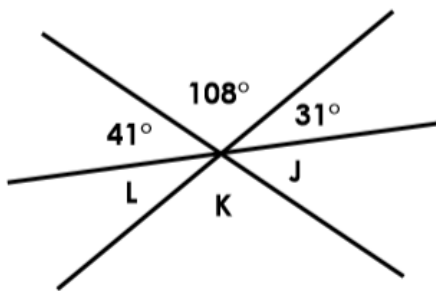
7a. Which angles total 180° ?



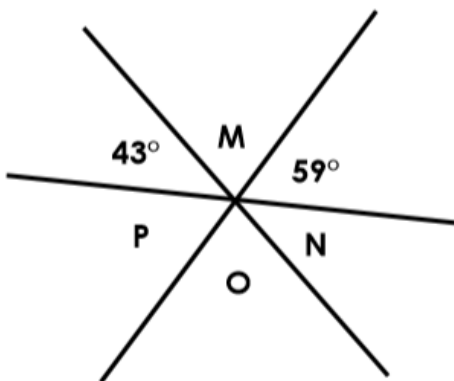
Work out the unknown angles.



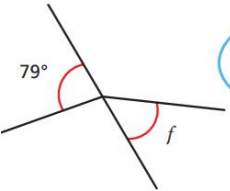


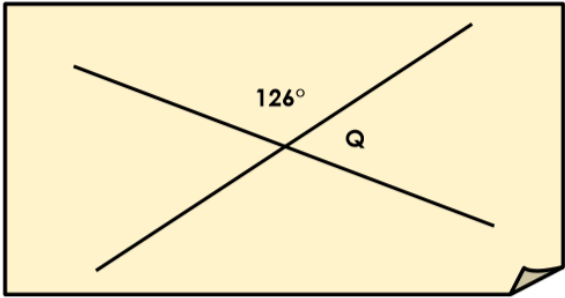

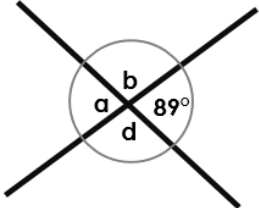
Find angles J, K and L.



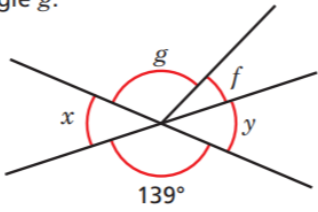
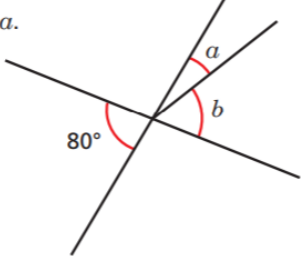
Find angles M, N, O and P.



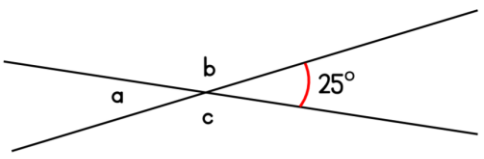

Reasoning

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>Annie is working out the size of angle f.</p>  <p>Angle f is equal to 79° because vertically opposite angles are equal.</p>  <p>Do you agree with Annie? _____ Explain your answer.</p>	
<p>Anita says...</p>  <p>The missing angle (Q) measures 108 degrees.</p>  <p>Do you agree? Explain why / why not!</p>	
<p>5b. Jack says:</p>  <p>I think that angle d measures 90°.</p>  <p>Is Jack correct? Explain why.</p>	

Problem Solving

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>Angle f is one quarter of the size of angle g.</p> <p>Angle f is 28°.</p> <div style="text-align: center;">  </div> <p>Are angles x and y vertically opposite? _____</p> <p>Explain your answer.</p>	
<p>Angle b is three times the size of angle a.</p> <div style="text-align: center;">  </div> <p>Work out the sizes of angles a and b.</p> <p>$a =$ <input style="width: 50px; height: 20px;" type="text"/> $b =$ <input style="width: 50px; height: 20px;" type="text"/></p>	

Extension

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> True or False? Vertically opposite </div> <div style="text-align: center;">  </div> <div style="margin-top: 10px;">  <div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block; margin-left: 10px;"> If I know the size of one of the angles I can find the other three. </div> </div>	