



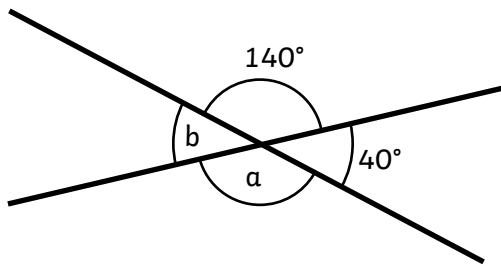
# Vertically Opposite Angles

I can find unknown angles which are vertically opposite.



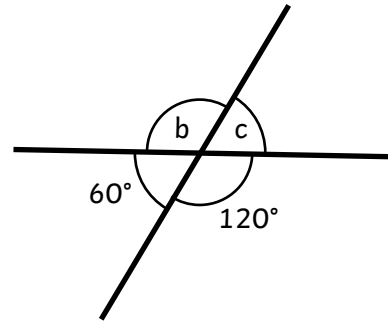
Calculate the missing angles:

1.



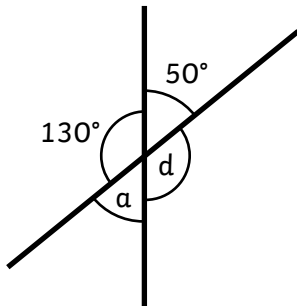
$a = \text{-----}^\circ$     $b = \text{-----}^\circ$

2.



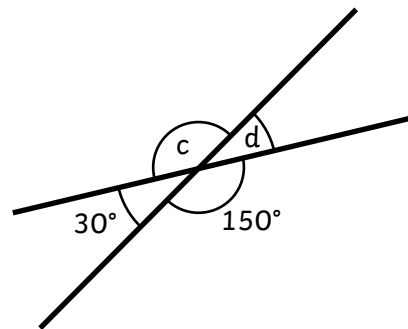
$b = \text{-----}^\circ$     $c = \text{-----}^\circ$

3.



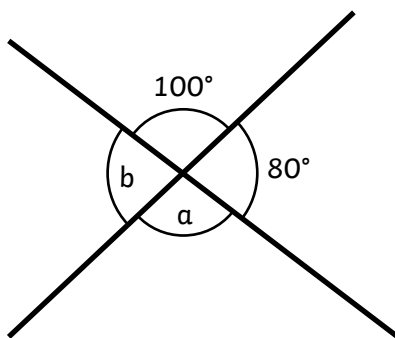
$a = \text{-----}^\circ$     $d = \text{-----}^\circ$

4.



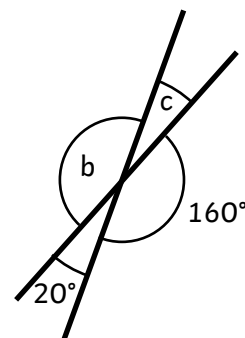
$c = \text{-----}^\circ$     $d = \text{-----}^\circ$

5.



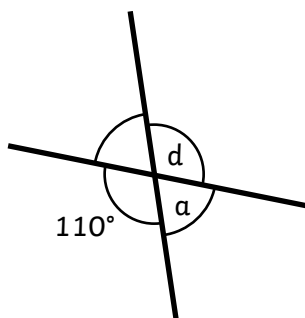
$a = \text{-----}^\circ$     $b = \text{-----}^\circ$

6.



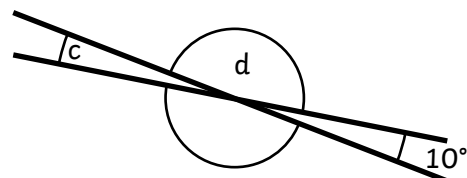
$b = \text{-----}^\circ$     $c = \text{-----}^\circ$

7.



$a = \text{-----}^\circ$     $d = \text{-----}^\circ$

8.



$c = \text{-----}^\circ$     $d = \text{-----}^\circ$



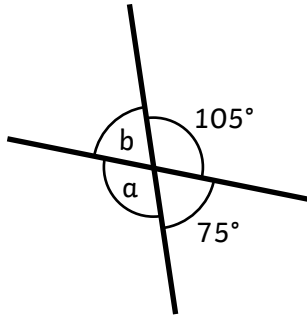
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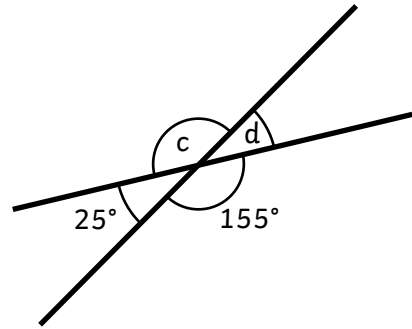
Calculate the missing angles:

1.



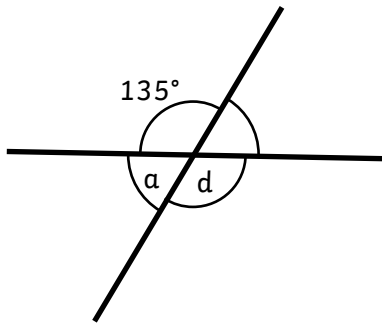
$a = \text{-----}^\circ$      $b = \text{-----}^\circ$

2.



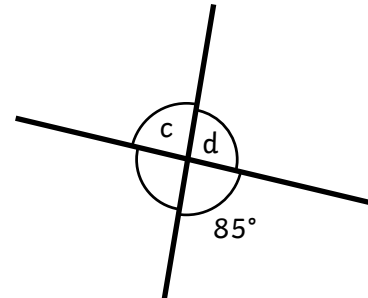
$c = \text{-----}^\circ$      $d = \text{-----}^\circ$

3.



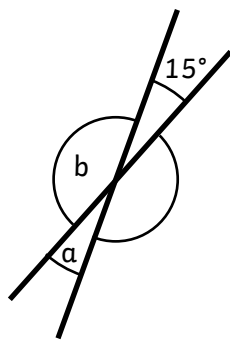
$a = \text{-----}^\circ$      $d = \text{-----}^\circ$

4.



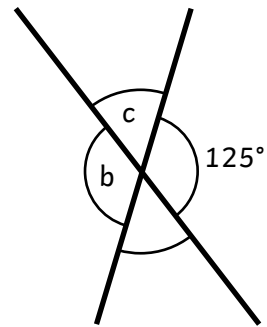
$c = \text{-----}^\circ$      $d = \text{-----}^\circ$

5.



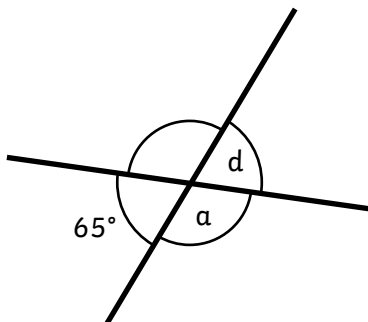
$a = \text{-----}^\circ$      $b = \text{-----}^\circ$

6.



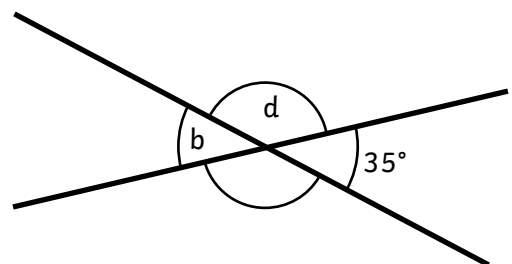
$b = \text{-----}^\circ$      $c = \text{-----}^\circ$

7.



$a = \text{-----}^\circ$      $d = \text{-----}^\circ$

8.



$b = \text{-----}^\circ$      $d = \text{-----}^\circ$

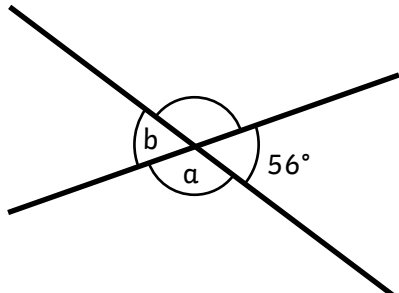
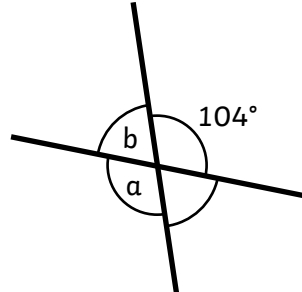
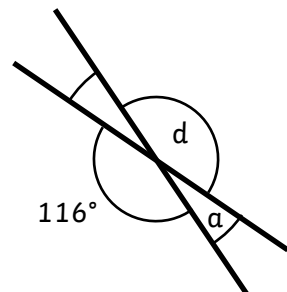
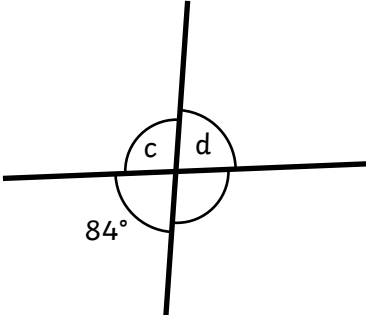
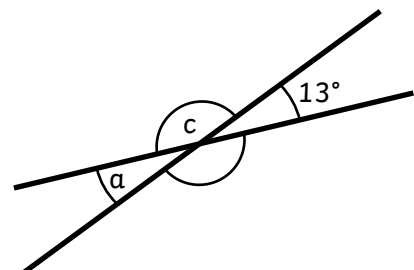
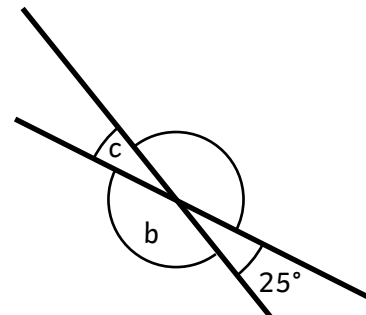
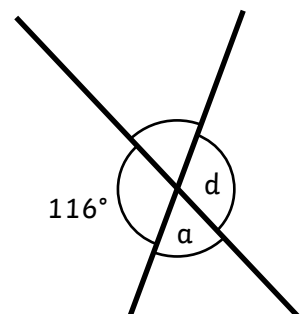
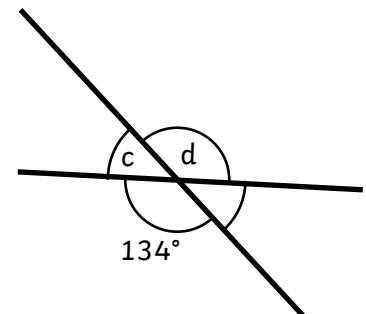


# Vertically Opposite Angles

I can find unknown angles which are vertically opposite.



Calculate the missing angles:

<p>1.</p>  <p><math>a = \text{-----}^\circ</math>   <math>b = \text{-----}^\circ</math></p>	<p>2.</p>  <p><math>b = \text{-----}^\circ</math>   <math>c = \text{-----}^\circ</math></p>
<p>3.</p>  <p><math>a = \text{-----}^\circ</math>   <math>d = \text{-----}^\circ</math></p>	<p>4.</p>  <p><math>c = \text{-----}^\circ</math>   <math>d = \text{-----}^\circ</math></p>
<p>5.</p>  <p><math>a = \text{-----}^\circ</math>   <math>b = \text{-----}^\circ</math></p>	<p>6.</p>  <p><math>b = \text{-----}^\circ</math>   <math>c = \text{-----}^\circ</math></p>
<p>7.</p>  <p><math>a = \text{-----}^\circ</math>   <math>d = \text{-----}^\circ</math></p>	<p>8.</p>  <p><math>c = \text{-----}^\circ</math>   <math>d = \text{-----}^\circ</math></p>

★		Question	Answer	Question	Answer
1.	$a = 140^\circ$	$b = 40^\circ$	5.	$a = 100^\circ$	$b = 80^\circ$
2.	$b = 120^\circ$	$c = 60^\circ$	6.	$b = 160^\circ$	$c = 20^\circ$
3.	$a = 50^\circ$	$d = 130^\circ$	7.	$a = 70^\circ$	$d = 110^\circ$
4.	$c = 150^\circ$	$d = 30^\circ$	8.	$c = 10^\circ$	$d = 170^\circ$

★★		Question	Answer	Question	Answer
1.	$a = 105^\circ$	$b = 75^\circ$	5.	$a = 15^\circ$	$b = 165^\circ$
2.	$b = 25^\circ$	$c = 155^\circ$	6.	$b = 125^\circ$	$c = 55^\circ$
3.	$a = 45^\circ$	$d = 135^\circ$	7.	$a = 115^\circ$	$d = 65^\circ$
4.	$c = 85^\circ$	$d = 95^\circ$	8.	$b = 35^\circ$	$d = 145^\circ$

★★★		Question	Answer	Question	Answer
1.	$a = 124^\circ$	$b = 56^\circ$	5.	$a = 13^\circ$	$b = 167^\circ$
2.	$a = 104^\circ$	$b = 76^\circ$	6.	$b = 155^\circ$	$c = 25^\circ$
3.	$a = 64^\circ$	$d = 116^\circ$	7.	$a = 64^\circ$	$d = 116^\circ$
4.	$c = 96^\circ$	$d = 84^\circ$	8.	$c = 46^\circ$	$d = 134^\circ$