

Refer to the figure above for exercises 1-2.

1) If $AC = 24$, find the value of x . Then find AB and BC .

2) If $AC = 14$, find the value of x . Then find AB and BC .

3) If $RS = 2x + 1$ and $ST = 3x - 2$ and $RT = 24$, find the value of x . Then find RS and ST .



In the figure above, if $\overline{AC} \cong \overline{CE}$ and B is the midpoint of \overline{AC} . $CD = 2$ and $AB = 3$. Find the following:

4) BC

5) AC

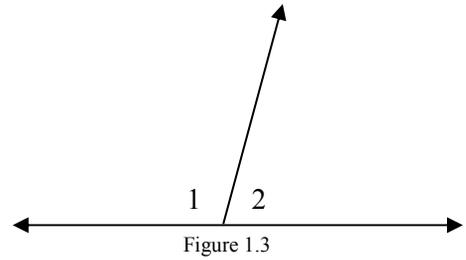
6) DE

Refer to figure 1.3 for exercises 7-9.

7) Find $m\angle 1$ if $m\angle 2 = 80$

8) Find $m\angle 1$ if $m\angle 2 = 82$

9) Find $m\angle 2$ if $m\angle 1 = 107$

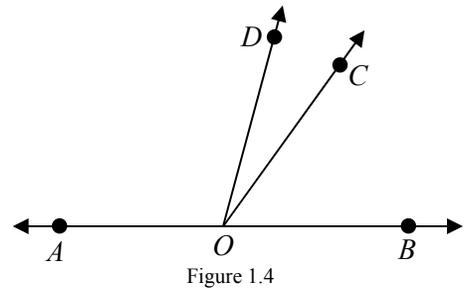


Refer to figure 1.4 for exercises 10-11.

Given: $m\angle AOD = 4x - 8$; $m\angle DOC = x - 11$

10) $m\angle COB = x + 13$

Find $m\angle AOD$



Given: $m\angle AOD = 5x - 4$; $m\angle DOC = 2x + 3$

11) $m\angle COB = x + 13$

Find $m\angle AOD$

Answer Key

- 1) $x = 10, BC = 10, AB = 14$
- 2) $x = 5, BC = 5, AB = 9$
- 3) $x = 5, RS = 11, ST = 13$
- 4) 3
- 5) 6
- 6) 4
- 7) 100
- 8) 98
- 9) 73
- 10) 116
- 11) 101