

9. If $m\angle EOD = 40^\circ$, find the measure of the angles below.

$$m\angle EOA = 140^\circ$$

$$m\angle AOB = 40^\circ$$

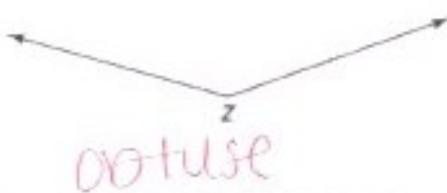
$$m\angle BOC = 50^\circ$$

$$m\angle DOC = 90^\circ$$

use diagram
from previous
page

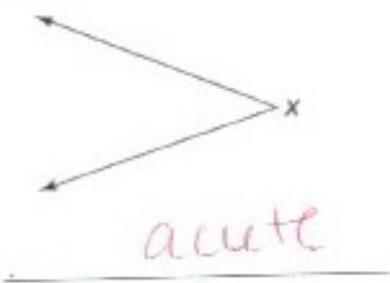
Decide whether each angle below is acute, right, obtuse, or a straight angle.

10.



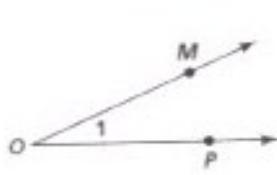
obtuse

11.



acute

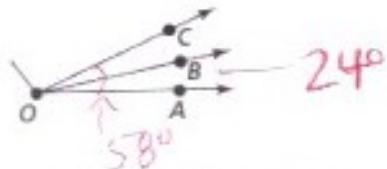
12. Name the angle below in 2 different ways.



$\angle MOP$

$\angle 1$

Use the diagram below for 13 and 14.



13. If $m\angle COA = 58^\circ$ and $m\angle BOA = 24^\circ$, find $m\angle AOB$.

$$m\angle AOB = 24$$

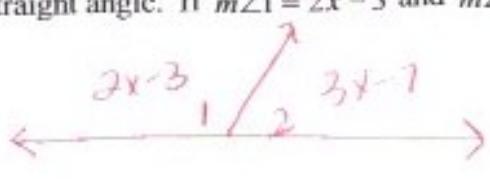
$$m\angle BOC \text{ or } \angle COB = 34^\circ$$

14. If $m\angle AOB = x + 3$, $m\angle AOC = 2x + 11$, and $m\angle BOC = 4x - 7$, find the value of x .

$$x = 5$$

$$\begin{aligned} x + 3 + 4x - 7 &= 2x + 11 \\ 5x - 4 &= 2x + 11 \\ 3x - 4 &= 11 \\ 3x &= 15 \\ x &= 5 \end{aligned}$$

15. $\angle 1$ and $\angle 2$ form a straight angle. If $m\angle 1 = 2x - 3$ and $m\angle 2 = 3x - 7$, find x .



$$\begin{aligned} 2x - 3 + 3x - 7 &= 180 \\ 5x - 10 &= 180 \\ 5x &= 190 \\ x &= 38 \end{aligned}$$