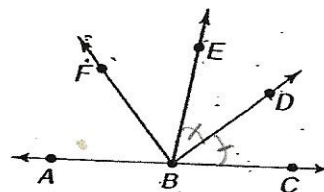


Use the figure at the right to classify each angle as right, acute or obtuse.

14. $\angle NMP$ right	15. $\angle OMN$ acute	16. $\angle QMN$ obtuse	17. $\angle QMO$ SKIP
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In the figure, \overline{BA} and \overline{BC} are opposite rays, \overline{BD} bisects $\angle EBC$.

8. If $m\angle EBD = 4x + 16$, & $m\angle DBC = 6x + 4$ find $m\angle EBD$



$$\begin{aligned} 4x + 16 &= 6x + 4 \\ -4x &\quad -4x \\ 16 &= 2x + 4 \\ -4 &\quad -4 \\ 12 &= 2x \\ \frac{12}{2} &= \frac{2x}{2} \end{aligned}$$

$$\begin{aligned} m\angle EBD &= 4x + 16 \\ &= 4(6) + 16 \\ &= 24 + 16 \\ &= 40 \end{aligned}$$

$m\angle EBD = 40$

$x = 6$

If U is between T and B, find the value of x and the measure of \overline{TU} .

9. $\overline{TU} = 2x$, $\overline{UB} = 3x + 1$, $\overline{TB} = 21$

$$(2x) + (3x + 1) = 21$$

$$5x + 1 = 21$$

$$\frac{5x}{5} = \frac{20}{5}$$

$x = 4$

$$\overline{TU} = 2x = 2(4) = 8$$

$\overline{TU} = 8$

10. $\overline{TU} = 1 - x$, $\overline{UB} = 4x + 17$, $\overline{TB} = -3x$

$$(1 - x) + (4x + 17) = -3x$$

$$1 + 3x + 17 = -3x$$

$$3x + 18 = -3x$$

$$\frac{18}{-6} = \frac{-6x}{-6}$$

$-3 = x$

$$\overline{TU} = 1 - x = 1 - (-3) = 1 + 3 = 4$$

$\overline{TU} = 4$