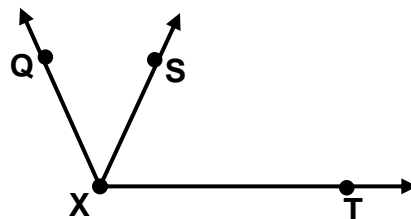


NAME _____ DATE _____ PER. _____

A# 2-4: Angle Addition & Angle Bisector

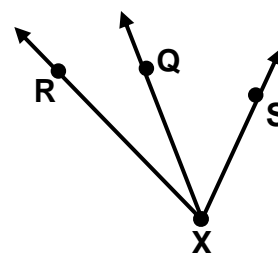
Use the Angle Addition Postulate to find the value of 'x' and the measure of the angle indicated for each of the following problems.

1. $m\angle SXT = (4x + 1)^\circ$, $m\angle QXS = (2x - 2)^\circ$,
and $m\angle QXT = 125^\circ$. Find $m\angle QXS$.



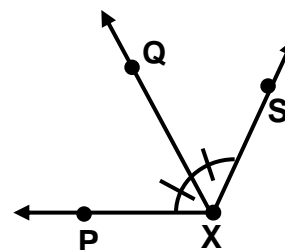
$m\angle QXS =$ _____

2. $m\angle RXQ = (x + 15)^\circ$, $m\angle RXS = (5x - 7)^\circ$,
and $m\angle QXS = (3x + 5)^\circ$. Find $m\angle RXS$.



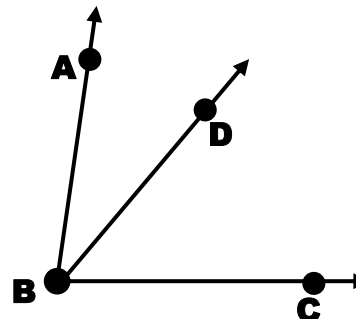
$m\angle RXS =$ _____

3. $m\angle PXQ = (8x - 3)^\circ$, $m\angle PXS = (10x + 30)^\circ$.
Find $m\angle QXS$.



$m\angle QXS =$ _____

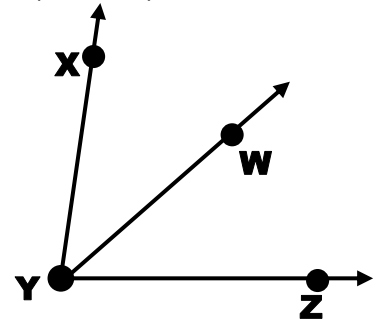
4. $m\angle ABD = (3x + 1)^\circ$, $m\angle DBC = (4x - 7)^\circ$ and $m\angle ABC = 85^\circ$. Find $m\angle ABD$.



$m\angle ABD =$ _____

Find the value(s) indicated.

5. YW is a bisector of $\angle XYZ$. $m\angle XYW = (8x - 5)^\circ$ and $m\angle WYZ = (6x + 17)^\circ$.
Find $m\angle XYZ$.



$m\angle XYZ = \underline{\hspace{2cm}}$

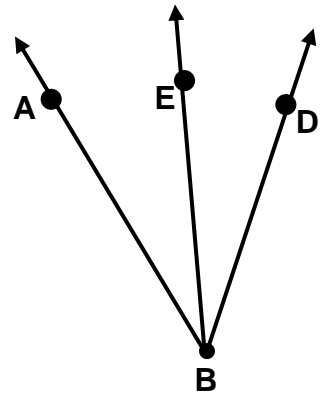
Given that \overrightarrow{BE} bisects $\angle ABD$ below, find each of the following.

6. $\underline{\hspace{2cm}}$

If $m\angle ABE = (6x + 2)^\circ$ and $m\angle DBE = (8x - 14)^\circ$, find $m\angle ABE$.

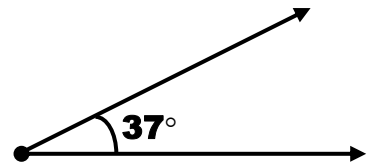
7. $\underline{\hspace{2cm}}$

If $m\angle ABD = (22n - 11)^\circ$ and $m\angle ABE = (12n - 8)^\circ$, find $m\angle EBD$.



REVIEW

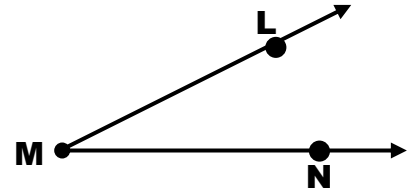
8. Classify the angle: _____



9. Name the angle _____

Name the vertex _____

Name the sides of the angle: _____



Y is between X and Z, $XY = 3x + 1$, $YZ = 2x - 2$, $XZ = 84$. Find each of the following.

10. $x =$ _____

11. $XY =$ _____

12. $YZ =$ _____