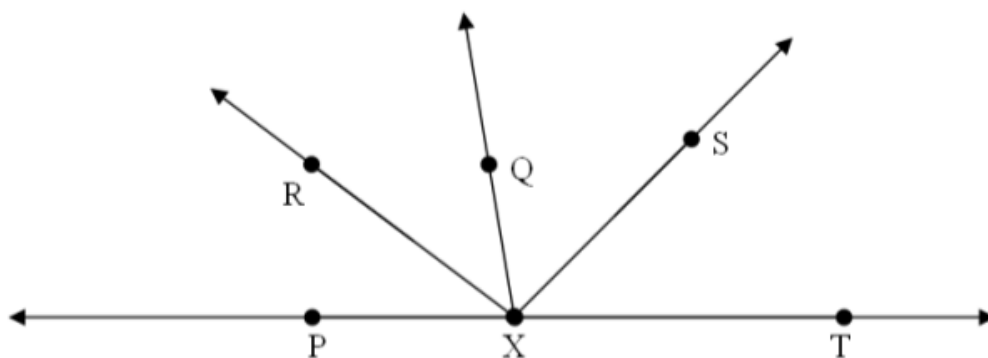


1. If Y is between A and B, find x and the measure of \overline{YB} when

$$AY = \frac{4}{5}x + 7, YB = \frac{7}{3}x - 1, \text{ and } AB = \frac{17}{4}x + 3$$

2. M is the midpoint of \overline{AB} . If $AM = 3x + 7y$, $MB = 2x + 5y + 4$, and $AB = 11x - y$, Find x , y , and AB .

3. Use the following figure. In the figure, \overrightarrow{XP} and \overrightarrow{XT} are opposite rays, \overrightarrow{XR} bisects $\angle QXP$ and \overrightarrow{XS} bisects $\angle QXT$.
If $m\angle PXQ = 7a + 23$, and $m\angle QXS = 13a - 14$,
find a and $m\angle PXS$.



4. The measure of the supplement of an \angle is five less than six times the \angle 's complement.
Find the measure of the \angle , the measure of its complement, and the measure of its supplement

**5. A ship on an azimuth of 217° suddenly moves on a bearing of N 76° W
Draw a figure to represent this.**

- 6. Two angles are complementary . One angle is seven less than twice the other.
Find both angle measurements in RADIANS**

7. An angle has a measure of $\frac{4\pi}{11}$.

Find the sum of the angles complement and supplement.