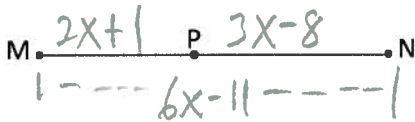


1. Based on the given information, choose the (one) correct equation that solves for the value of x.

Given:  $MP = 2x + 1$   
 $PN = 3x - 8$   
 $MN = 6x - 11$



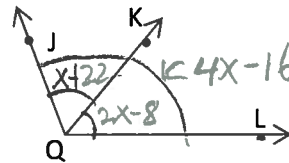
Equation Options:

- A.  $2x + 1 = 3x - 8$
- B.  $3x - 8 = 6x - 11$
- C.  $(2x + 1) + (3x - 8) = 6x - 11$
- D.  $2x + 1 = 6x - 11$
- E.  $(2x + 1) + (6x - 11) = 3x - 8$

2. Based on the given information, choose the (one) correct equation that solves for the value of x.

Given:  $\vec{QK}$  bisects  $\angle JQL$ .

$m\angle JQL = 4x - 16$   
 $m\angle JQK = x + 22$   
 $m\angle KQL = 2x - 8$



Equation Options:

- A.  $4x - 16 = 2x - 8$
- B.  $x + 22 = 2x - 8$
- C.  $(x + 22) + (2x - 8) = 90^\circ$
- D.  $x + 22 = 4x - 16$
- E.  $(x + 22) + (2x - 8) + (4x - 16) = 180^\circ$

3. Solve the equation you chose from problem #1.

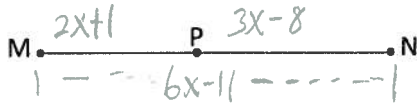
$$\begin{aligned}
 2x + 1 + 3x - 8 &= 6x - 11 \\
 5x - 7 &= 6x - 11 \\
 -5x + 11 & \quad -5x + 11 \\
 \hline
 4 &= x
 \end{aligned}$$

4. Solve the equation you chose from problem #2.

$$\begin{aligned}
 x + 22 &= 2x - 8 \\
 -x + 8 & \quad -x + 8 \\
 \hline
 30 &= x
 \end{aligned}$$

1. Based on the given information, choose the (one) correct equation that solves for the value of x.

Given:  $MP = 2x + 1$   
 $PN = 3x - 8$   
 $MN = 6x - 11$



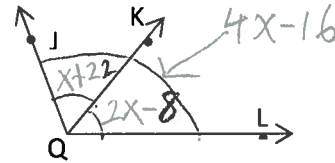
Equation Options:

- A.  $(2x + 1) + (3x - 8) = 6x - 11$
- B.  $3x - 8 = 6x - 11$
- C.  $2x + 1 = 3x - 8$
- D.  $(2x + 1) + (6x - 11) = 3x - 8$
- E.  $2x + 1 = 6x - 11$

2. Based on the given information, choose the (one) correct equation that solves for the value of x.

Given:  $\vec{QK}$  bisects  $\angle JQL$ .

$m\angle JQL = 4x - 16$   
 $m\angle JQK = x + 22$   
 $m\angle KQL = 2x - 8$



Equation Options:

- A.  $x + 22 = 4x - 16$
- B.  $(x + 22) + (2x - 8) + (4x - 16) = 180^\circ$
- C.  $4x - 16 = 2x - 8$
- D.  $x + 22 = 2x - 8$
- E.  $(x + 22) + (2x - 8) = 90^\circ$

3. Solve the equation you chose from problem #1.

$$\begin{aligned}
 2x + 1 + 3x - 8 &= 6x - 11 \\
 5x - 7 &= 6x - 11 \\
 -5x + 11 &\quad -5x + 11 \\
 \hline
 4 &= x
 \end{aligned}$$

4. Solve the equation you chose from problem #2.

$$\begin{aligned}
 x + 22 &= 2x - 8 \\
 -x + 8 &\quad -x + 8 \\
 \hline
 x &= 30
 \end{aligned}$$