

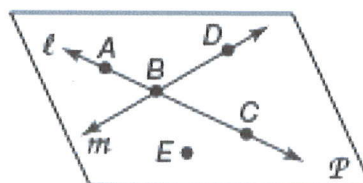
Name: Henry

Date: _____

Station Review 1 Ch. 1.1

1. Find the intersection point of line l and line m .

point B

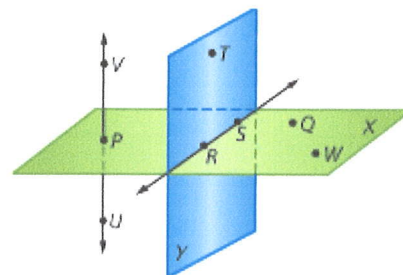


2. Name three collinear points. (Use diagram to the right)

V, P, U

3. Name three coplanar points. (Use diagram to the right)

T, R, S or Q, W, P



4. Where do plane Y and plane X intersect. (Use the figure above)

$\overleftrightarrow{RS}$

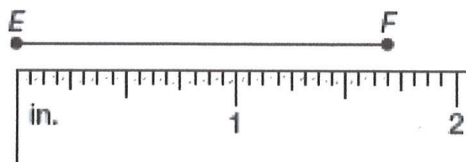
Name: _____

Date: _____

Station Review 2 Ch. 1.2

1. Find the length of the EF .

$1\frac{11}{16}$ in



2. Find the value of XP if x is between p and q . $XQ = 3k$, $XP = 7k - 2$, and $PQ = 6k + 16$

$$\begin{aligned} PX + XQ &= PQ \\ 7k - 2 + 3k &= 6k + 16 \\ 10k &= 6k + 18 \\ 4k &= 18 \\ k &= 4.5 \end{aligned}$$

$$\begin{aligned} XP &= (7)(4.5) - 2 \\ &= 31.5 - 2 \\ &= 29.5 \end{aligned}$$

3. Find the value of XP if x is between p and q . $XQ = 13$, $XP = 5x - 3$ and $PQ = 40$

$$\begin{aligned} PX + XQ &= PQ \\ 5x - 3 + 13 &= 40 \\ 5x + 10 &= 40 \\ 5x &= 30 \\ x &= 6 \end{aligned}$$

$$\begin{aligned} XP &= 5(6) - 3 \\ &= 30 - 3 \\ &= 27 \end{aligned}$$

Name: Kelly
Station Review 3 Ch. 1.3

Date: _____

1. Find the distance between A (-3, 1) and B (7, 13).

$$\begin{aligned} AB &= \sqrt{10^2 + 12^2} \\ &= \sqrt{100 + 144} \\ &= \sqrt{244} = \sqrt{4 \cdot 61} = 2\sqrt{61} \approx 15.6 \end{aligned}$$

2. Find the midpoint of the given endpoints L (-3, 16) and M (15, 4).

$$\begin{aligned} M &= \left(\frac{-3+15}{2}, \frac{16+4}{2} \right) \\ &= \left(\frac{12}{2}, \frac{20}{2} \right) \end{aligned} \quad \boxed{M = (6, 10)}$$

3. Find the coordinates of the missing endpoint if P is the midpoint of $\overline{NQ}$ where N(2, 0) and P(5, 2).

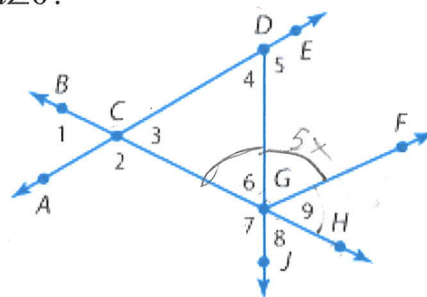
$$\begin{aligned} (5, 2) &= \left(\frac{x+2}{2}, \frac{y+0}{2} \right) \quad (8, 4) \\ 5 &= \frac{x+2}{2} \quad 2 = \frac{y+0}{2} \\ 10 &= x+2 \quad 4 = y \\ 8 &= x \end{aligned}$$

Name: _____
Station Review 4 Ch. 1.4

Date: _____

1. Use the diagram if $\overline{GF}$ bisects $\angle DGH$ and $\angle DGF = 50$, what is the $m\angle 6$?

$$\begin{aligned} \angle 6 + \angle DGF + \angle 9 &= 180 \\ \angle 6 + 50 + 50 &= 180 \\ \angle 6 + 100 &= 180 \\ \angle 6 &= 80 \end{aligned}$$

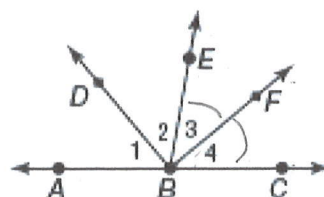


2. Use the diagram if $\overline{DG}$ bisects $\angle CGF$ and $\angle CGD = 4x + 10$ and $\angle DGF = 5x$. Find the value of x and the measure of $\angle CGF$.

$$\begin{aligned} 4x + 10 &= 5x \\ 10 &= x \\ \angle CGF &= 4(10) + 10 + 5(10) \\ &= 40 + 10 + 50 \\ \angle CGF &= 100 \end{aligned}$$

3. $\overline{BA}$ and $\overline{BC}$ are opposite rays and $\overline{BF}$ bisects $\angle CBE$. If $m\angle EBF = 6x + 4$ and $m\angle CBF = 7x - 2$, find the $m\angle EBF$.

$$\begin{aligned} 6x + 4 &= 7x - 2 \\ 6x + 6 &= 7x \\ 6 &= x \\ \angle EBF &= 6(6) + 4 \\ &= 36 + 4 \\ \angle EBF &= 40 \end{aligned}$$



Name: Key
Station Review 5 Ch. 1.5

Date: _____

1. Find the value of x and y so that $\overrightarrow{NR} \perp \overrightarrow{MQ}$.

$$9y + 18 = 90$$

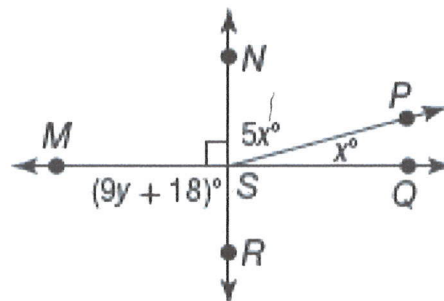
$$9y = 72$$

$$\boxed{y = 8}$$

$$5x + x = 90$$

$$6x = 90$$

$$\boxed{x = 15}$$



2. Name two vertical angles and a linear pair.

Vertical: $\angle MSN$, $\angle RSQ$

linear pair: $\angle MSN$, $\angle NSQ$ or $\angle MSR$, $\angle RSQ$

3. Two angles are complementary. The measure of one angle is 21 more than twice the measure of the other angle. Find the measures of the angles.

$$x + 21 + 2x = 90$$

$$21 + 3x = 90$$

$$3x = 69$$

$$x = 23$$

$$\boxed{\begin{matrix} \angle 1 = 23^\circ \\ \angle 2 = 67^\circ \end{matrix}}$$

$$\begin{aligned} \angle 1 &= x & \angle 2 &= 21 + 2x \\ & & &= 21 + 2(23) \\ & & &= 21 + 46 \\ & & &= 67 \end{aligned}$$

Name: _____

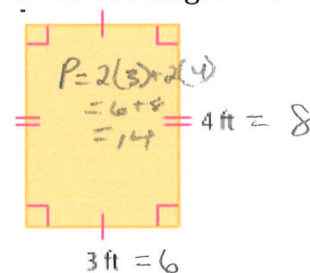
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Station Review 6 Ch. 1.6

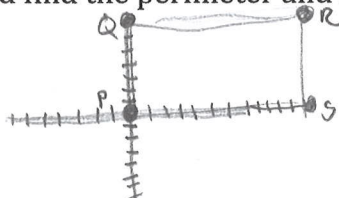
1. The length and width of the rectangle are doubled. Find the perimeter of the rectangle with the new dimensions and explain what happens to the perimeter.

$$\begin{aligned} P &= 2(6) + 2(8) \\ &= 12 + 16 \\ &= 28 \end{aligned}$$

When you double the length and width the perimeter doubles as well.



2. Graph the figure with the given vertices $P(0,0)$, $Q(0,7)$, $R(12,7)$, and $S(12,0)$. Name the figure and find the perimeter and area.



Quadrilateral

$$\begin{aligned} QR &= 12 \\ RS &= 7 \\ PS &= 12 \\ PQ &= 7 \end{aligned}$$

$$\begin{aligned} P &= 2(12) + 2(7) \\ &= 24 + 14 \\ P &= 38 \text{ units} \end{aligned}$$

$$\begin{aligned} A &= 7(12) \\ A &= 84 \text{ units}^2 \end{aligned}$$

3. Find the perimeter and area of the polygon.

$$P = 2.5 + 3 + 3.5$$

$$\boxed{P = 19 \text{ cm}}$$

$$A = \frac{1}{2}(3.5)(2)$$

$$\boxed{A = 3.5 \text{ cm}^2}$$

