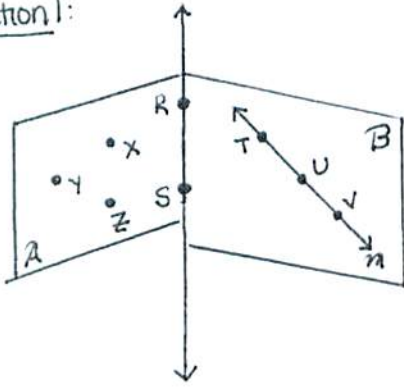


Geometry - Unit 1.1 Sections 1-4 Review

Key

Section 1:



① What is another name for line  $m$ ?

$\overleftrightarrow{TU}$  or  $\overleftrightarrow{TV}$  or  $\overleftrightarrow{UV}$

② Name three points on plane B. (more than one correct answer)

T, U, V OR R, S, T

③ Name the intersection of plane A and B.

$\overleftrightarrow{RS}$

④ Name three noncollinear points (more than 1 correct answer)

X, Y, Z

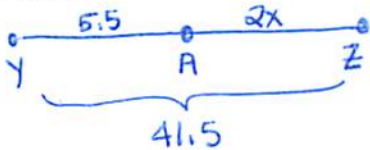
⑤ Name three noncoplanar points.

X, Z, T

(more than 1 correct answer)

Section 2:

⑥ Given A is between Y and Z and  $YA = 5.5$ ,  $AZ = 2x$ , and  $YZ = 41.5$ . Find AZ.



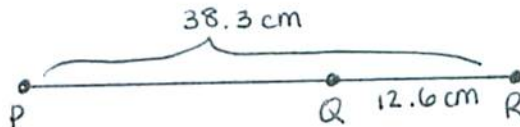
$$AZ = 41.5 - 5.5$$

$$AZ = 36$$

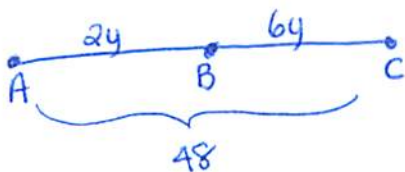
$$2x = 36$$

$$AZ = 2x = 36$$

⑦ Find the length of  $\overline{PQ}$   
 $PQ = 38.3 - 12.6 = 25.7$



⑧ Find the value of  $y$  if B is between A and C, AB is  $2y$ , BC is  $6y$ , and AC is 48.



$$AB + BC = AC$$

$$2y + 6y = 48$$

$$8y = 48$$

$$y = 6$$

⑨ Find the distance between  $P(2, 8)$  and  $Q(5, 3)$ .

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$d = \sqrt{(5 - 2)^2 + (3 - 8)^2}$$

$$d = \sqrt{3^2 + (-5)^2}$$

$$d = \sqrt{9 + 25}$$

$$d = \sqrt{34}$$



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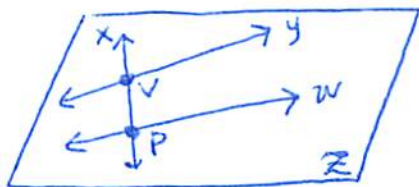
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- ⑩ Find the coordinates of the midpoint of  $\overline{LB}$  if  $L(8,5)$  and  $B(-6,2)$
- midpoint  $\left( \frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$
- $\left( \frac{8+(-6)}{2}, \frac{5+2}{2} \right)$
- $\left( \frac{2}{2}, \frac{7}{2} \right)$   $\rightarrow$   $(1, \frac{7}{2})$  or  $(1, 3.5)$

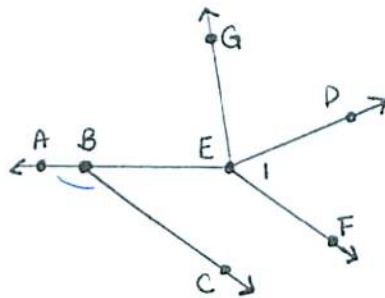
- ⑪ Draw and label a figure for the relationship. (Section 1)
- Plane  $Z$  contains lines  $x, y, w$ . Lines  $x$  and  $y$  intersect at point  $V$  and lines  $x$  and  $w$  intersect at point  $P$ .



- ⑫   
  $AB = \underline{7}$    
 midpoint of  $AC = \underline{3}$

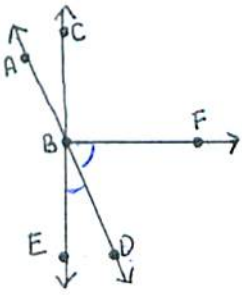
Section 3:

- ⑬ a) What type of angle is  $\angle ABC$ ?   
 acute, right, obtuse, or straight.   
 **obtuse**
- b) What is the vertex of  $\angle GED$ ?   
 **E**
- c) What are the sides of  $\angle GED$ ?   
  **$\overrightarrow{EG}$   $\overrightarrow{ED}$**
- d) Give another name for  $\angle 1$ .   
  **$\angle DEF$  or  $\angle FED$**



- ⑭ What is an angle bisector?   
 a ray/line that cuts an angle into 2 angles of equal measure.





- 15) Find  $m\angle FBD$  if  $\angle FBD$  and  $\angle DBE$  are complementary and  $m\angle FBD$  is twice  $m\angle DBE$

Let  $m\angle DBE = x$   
 $m\angle FBD = 2x$

$$m\angle DBE + m\angle FBD = 90$$

$$2x + x = 90$$

$$3x = 90$$

$$x = 30$$

$$m\angle FBD = 2x = 2(30)$$

$$m\angle FBD = 60$$

- 16) Refer to diagram above. Which pairs of angles are supplementary?

~~A.~~  $\angle ABE, \angle CBD$

~~B.~~  $\angle ABC, \angle ABD$

**C.**  $\angle ABC, \angle CBD$

~~D.~~  $\angle ABC, \angle EBD$

- 17) Refer to diagram above. If  $m\angle CBF = 6x + 18$ , find the value of  $x$  so that  $\overline{CB} \perp \overline{BF}$ .

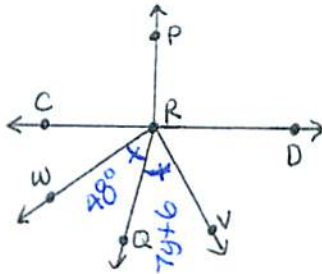
Perpendicular Lines make  $90^\circ$  angles

$$6x + 18 = 90$$

$$6x = 72$$

$$x = 12$$

- 18) In the figure,  $\overrightarrow{RC}$  and  $\overrightarrow{RD}$  are opposite rays and  $\overrightarrow{RQ}$  bisects  $\angle WRV$ .



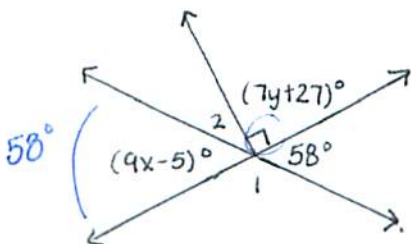
Find the value of  $y$  if  $m\angle WRQ = 48$  and  $m\angle QRV = 7y + 6$

$$7y + 6 = 48$$

$$7y = 42$$

$$y = 6$$

For #19-22, Refer to diagram below



- 19) Find the value of  $x$ .

$$9x - 5 = 58 \quad \text{vert. } \angle s$$

$$9x = 63$$

$$x = 7$$

- 20) Find  $m\angle 1$

$$180 - 58 = 122^\circ$$

- 21) Find  $m\angle 2$

$$58 + m\angle 2 = 90$$

$$m\angle 2 = 32$$

- 22) Find the value of  $y$ .

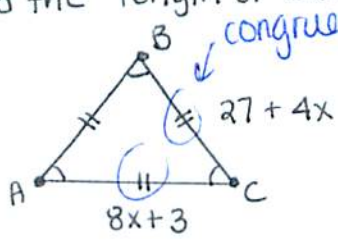
$$7y + 27 = 90$$

$$7y = 63$$

$$y = 9$$



23) Find the length of each side of triangle ABC.



$$27 + 4x = 8x + 3$$

$$24 = 4x$$

$$x = 6$$

$$\begin{aligned} AC = BC = AB &= 8x + 3 \\ &= 8(6) + 3 \\ &= 48 + 3 \end{aligned}$$

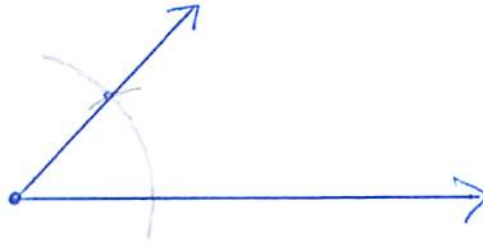
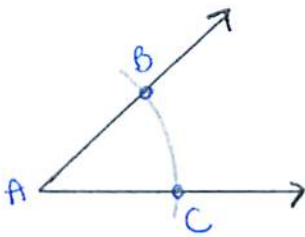
Section 4:

$$AC = BC = AB = 51$$

24) Copy the segment. Start w/ a working ray.



25) Copy the angle. Start w/ a working ray.



26) Draw a perpendicular bisector to the given line.

