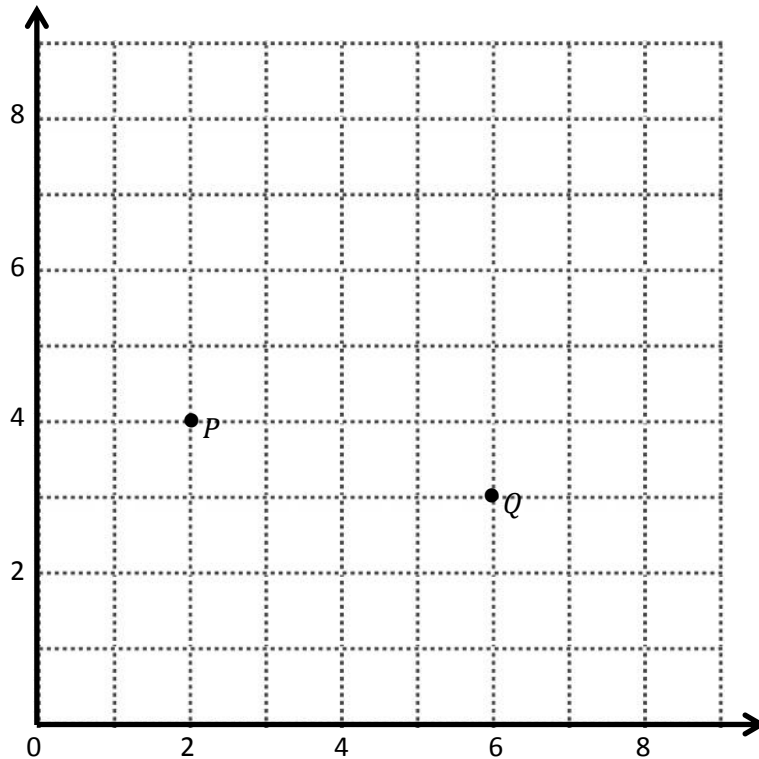


Name _____

Date _____

1. Use the coordinate plane below to complete the following tasks.

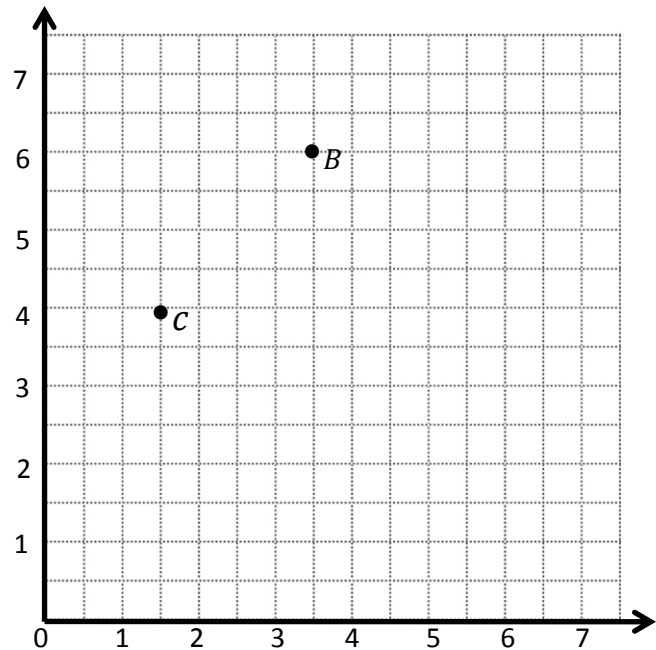
- Draw \overline{PQ} .
- Plot point $R (7, 7)$.
- Draw \overline{PR} .
- Explain how you know $\angle PQR$ is a right angle without measuring it.



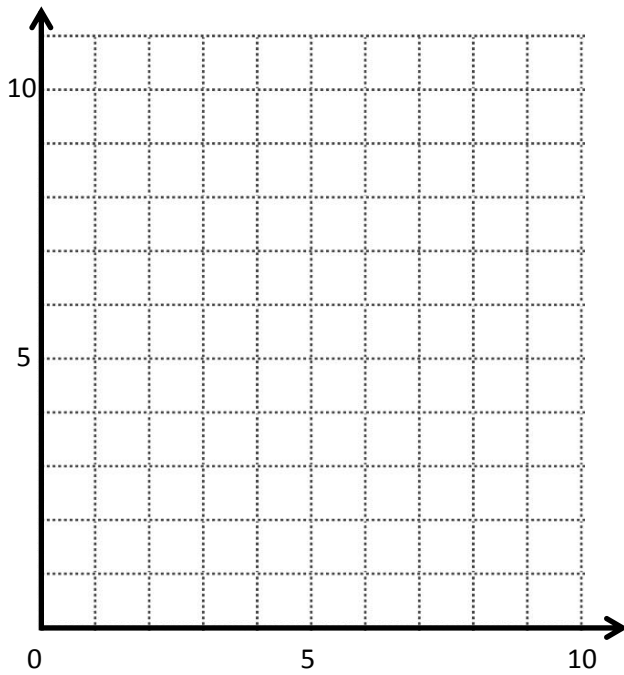
- Compare the coordinates of points P and Q . What is the difference of the x -coordinates? The y -coordinates?
- Compare the coordinates of points P and R . What is the difference of the x -coordinates? The y -coordinates?
- What is the relationship of the differences you found in (e) and (f) to the triangles of which these two segments are a part?

2. Use the coordinate plane below to complete the following tasks.

- Draw \overline{BC} .
- Plot point $D (3, 2\frac{1}{2})$.
- Draw \overline{BD} .
- Explain how you know $\angle BCD$ is a right angle without measuring it.
- Compare the coordinates of points B and C . What is the difference of the x -coordinates? The y -coordinates?
- Compare the coordinates of points B and D . What is the difference of the x -coordinates? The y -coordinates?

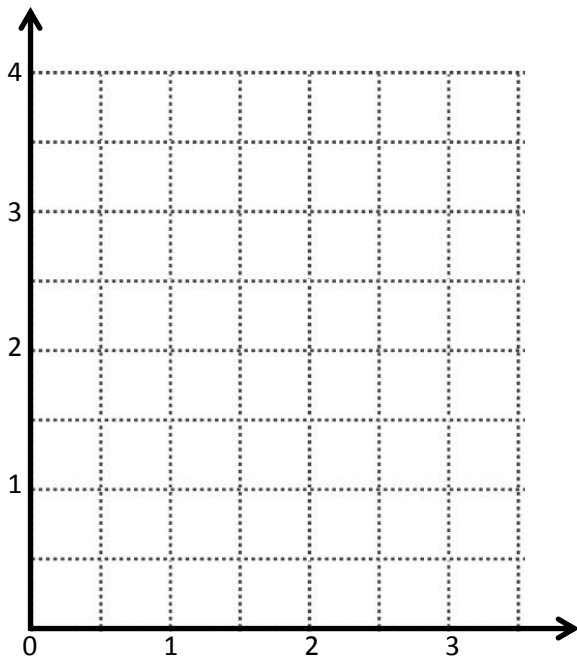
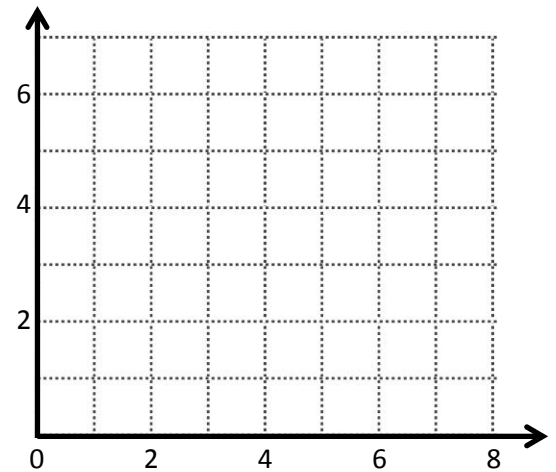


- What is the relationship of the differences you found in (e) and (f) to the triangles of which these two segments are a part?
3. \overleftrightarrow{ST} contains the following points. $S: (2, 3)$ $T: (9, 6)$
- Give the coordinates of a pair of points, U and V , such that $\overleftrightarrow{ST} \perp \overleftrightarrow{UV}$.
- $S: (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$ $T: (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$



	(x, y)
A	
B	
C	

	(x, y)
D	
E	
F	



	(x, y)
G	
H	
I	