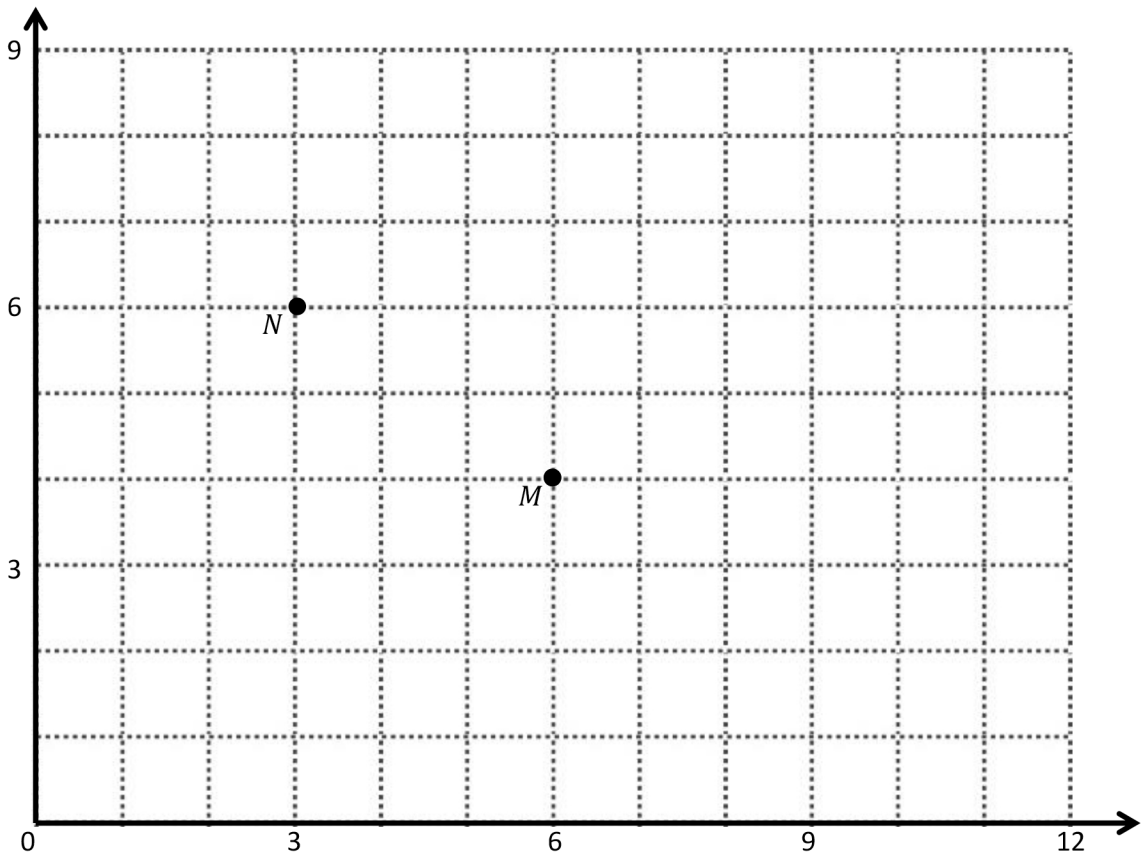
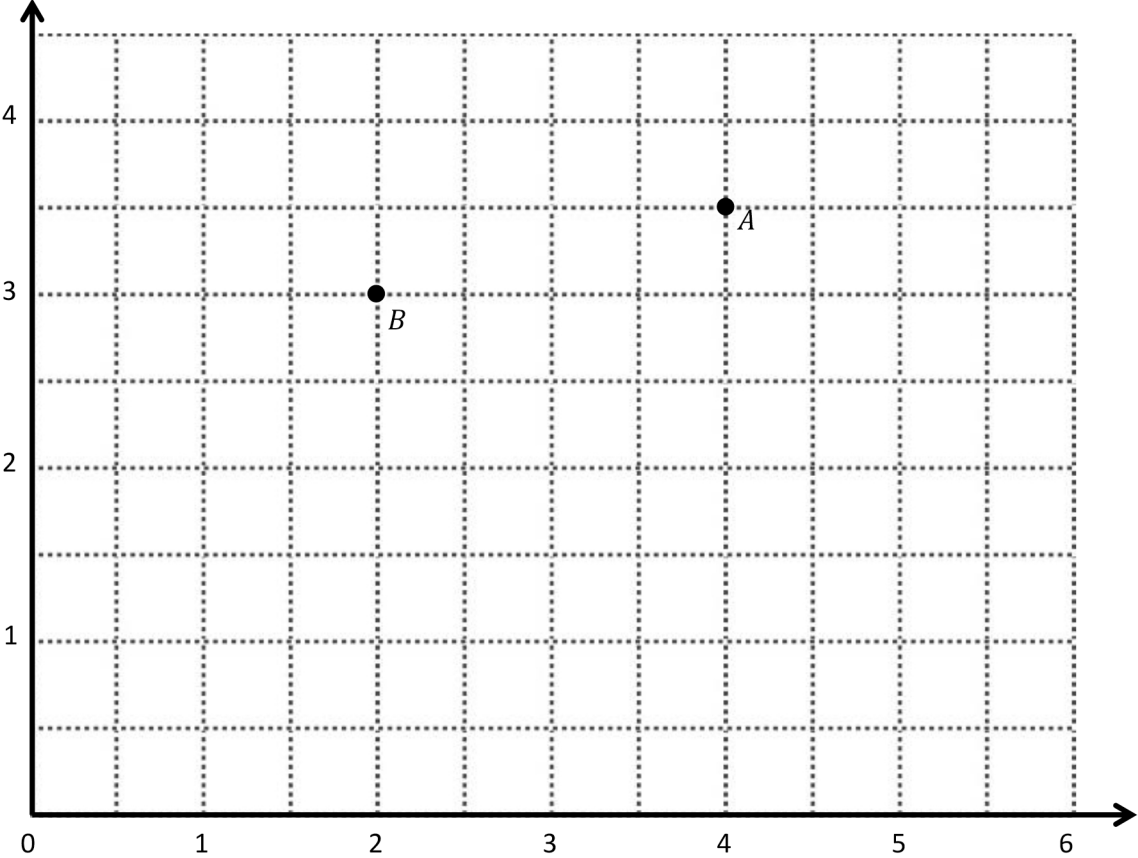


1. Use the coordinate plane below to complete the following tasks.



- a. Identify the locations of M and N .
 M : (____, ____)
 N : (____, ____)
- b. Draw \overrightarrow{MN} .
- c. Plot the following coordinate pairs on the plane.
 J : (5, 7)
 K : (8, 5)
- d. Draw \overrightarrow{JK} .
- e. Circle the relationship between \overrightarrow{MN} and \overrightarrow{JK} .
 $\overrightarrow{MN} \perp \overrightarrow{JK}$ $\overrightarrow{MN} \parallel \overrightarrow{JK}$
- f. Give the coordinates of a pair of points, F and G , such that $\overrightarrow{FG} \parallel \overrightarrow{MN}$.
 F : (____, ____)
 G : (____, ____)
- g. Draw \overrightarrow{FG} .

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



- a. Identify the locations of A and B . A : (____, ____) B : (____, ____)
- b. Draw \overleftrightarrow{AB} .
- c. Generate coordinate pairs for C and D , such that $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$.
 C : (____, ____) D : (____, ____)
- d. Draw \overleftrightarrow{CD} .
- e. Explain the pattern you used when generating coordinate pairs for C and D .
- f. Give the coordinates of a point, F , such that $\overleftrightarrow{AB} \parallel \overleftrightarrow{EF}$.

$E: (2\frac{1}{2}, 2\frac{1}{2})$ F : (____, ____)

- g. Explain how you chose the coordinates for F .

Answer Key

1.
 - a. $(6, 4); (3, 6)$
 - b. Accurate \overrightarrow{MN} drawn
 - c. Accurate coordinate pairs plotted
 - d. Accurate \overrightarrow{JK} drawn
 - e. $\overrightarrow{MN} \parallel \overrightarrow{JK}$ circled
 - f. Answers will vary.
 - g. Accurate \overrightarrow{FG} drawn
2.
 - a. $(4, 3\frac{1}{2} \text{ or } 3.5); (2, 3)$
 - b. Accurate \overrightarrow{AB} drawn
 - c. Answers will vary.
 - d. Accurate \overrightarrow{CD} drawn
 - e. Explanations will vary.
 - f. Answers will vary.
 - g. Explanations will vary.