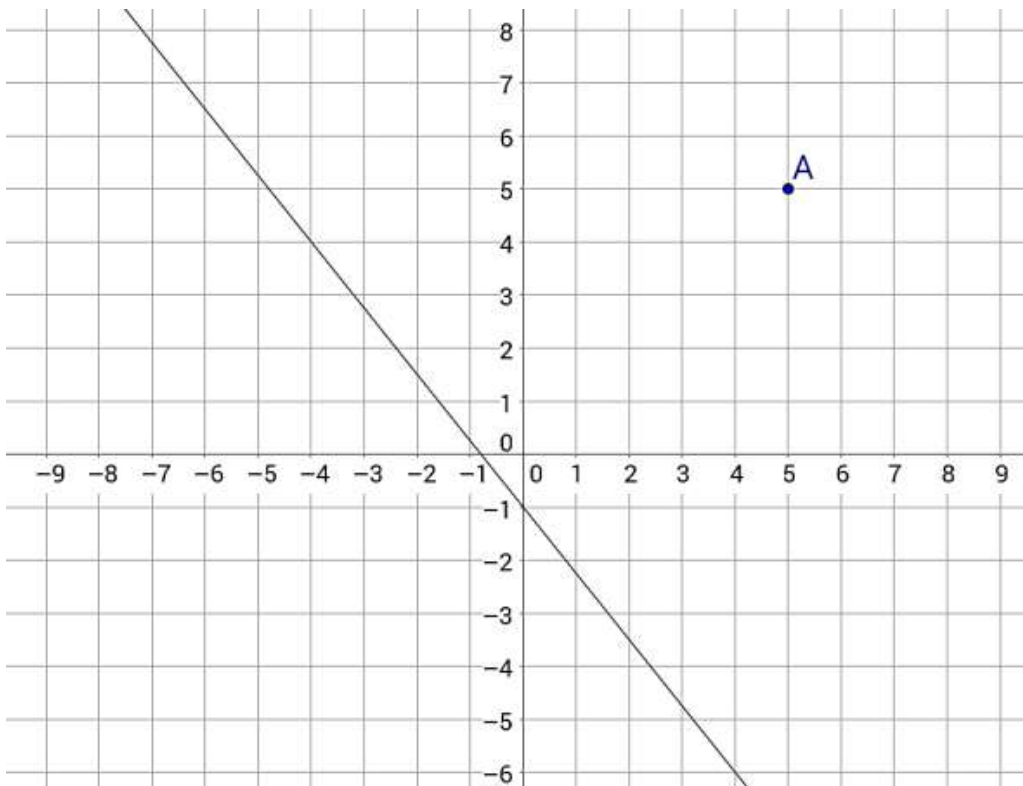


1. Do the following linear equations graph lines that are parallel, perpendicular, or neither? Use numbers to justify your answer.

$$\begin{cases} 3x + 2y = 4 \\ 4x - 6y = -18 \end{cases}$$

2. Graph a line that is perpendicular to the given line, that passes through the given point.

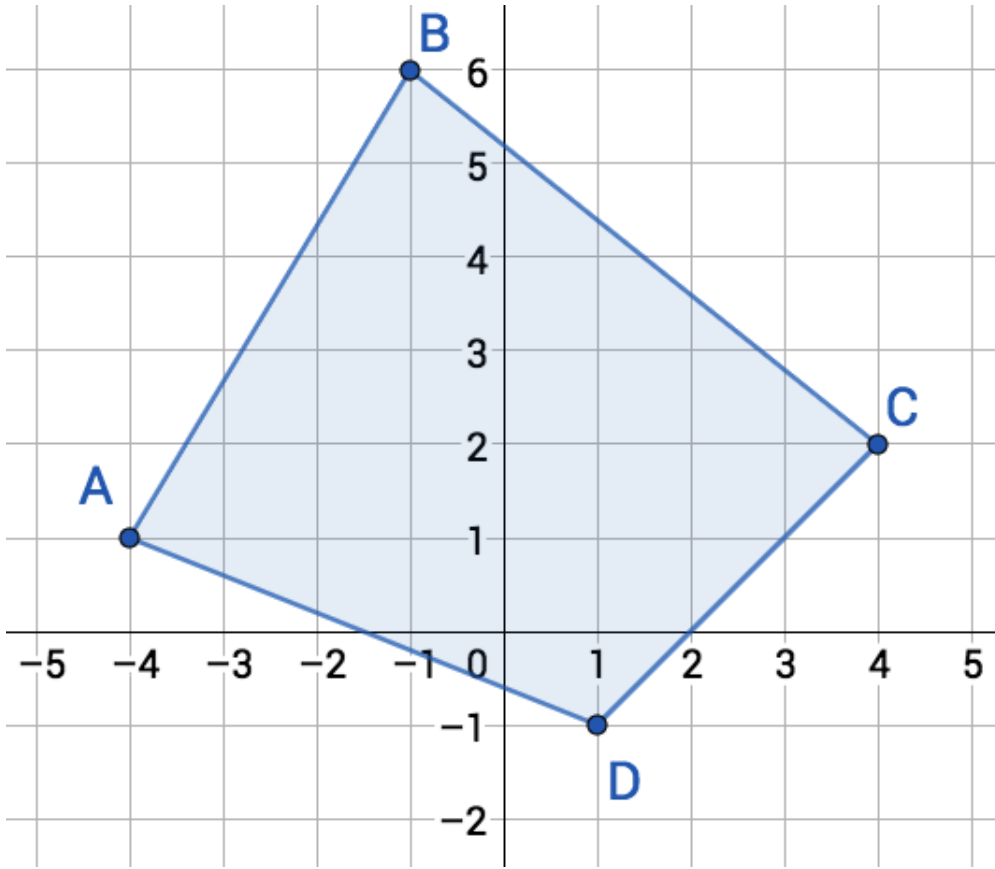


3. Which of the following linear equations graphs a line that passes through point  $(1, -3)$  and is parallel to  $y = -2x + 6$ ? Select all that apply.

$y = -2x - 1$         $y + 3 = -2(x - 1)$         $y = \frac{1}{2}x - \frac{7}{2}$         $y = -2x - 3$

GPE-B7a

4. Find the perimeter, to the nearest hundredth, of the quadrilateral ABCD. Show all work.



5. Using the figure above, find the coordinates of the midpoint of  $\overline{BC}$ .

6. (no figure provided) Suppose point S has coordinates  $(-12, 29)$  and point R has coordinates  $(-14, 20)$ . Find the exact distance between points S and R. Show all work.

CO-A1a

7. Give the precise definition of the term “line segment” in terms of points, lines, and planes. Then draw and label a line segment. Finally, give all possible names for the line segment you drew using correct notation.

8. Give all possible names, using correct notation, for the line shown here:

