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

$$
\left\{\begin{array}{c}
3 x+2 y=4 \\
4 x-6 y=-18
\end{array}\right.
$$

PERPENDICULAR: slope of first line is $-3 / 2$, second line is $4 / 6$ which reduces to 2/3. These are opposite reciprocals
2. Graph a line that is perpendicular to the given line, that passes through the given point.



## GPE-B7a

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


## Perimeter: 22.09 units

4. Using the figure above, find the coordinates of the midpoint of $\overline{B C}$.

Midpoint: $(3.5,3)$

