BECA / Dr. Huson / Geometry 06-Analytic-geometry   Name:

pset ID: 74

6-10bDN-Graphing

1. Checklist:

☐ I used a straight edge to make the lines

☐ I labeled each line with its original equation

☐ I labeled the intersection as an ordered pair

☐ I answered the question, explained, and wrote down the two slopes

Graph and label the two equations. Mark their intersection as an ordered pair.

$y = \frac{2}{3}x + 1$ $\qquad\qquad\qquad\qquad\qquad$ $y = \frac{2}{3}x - 4$

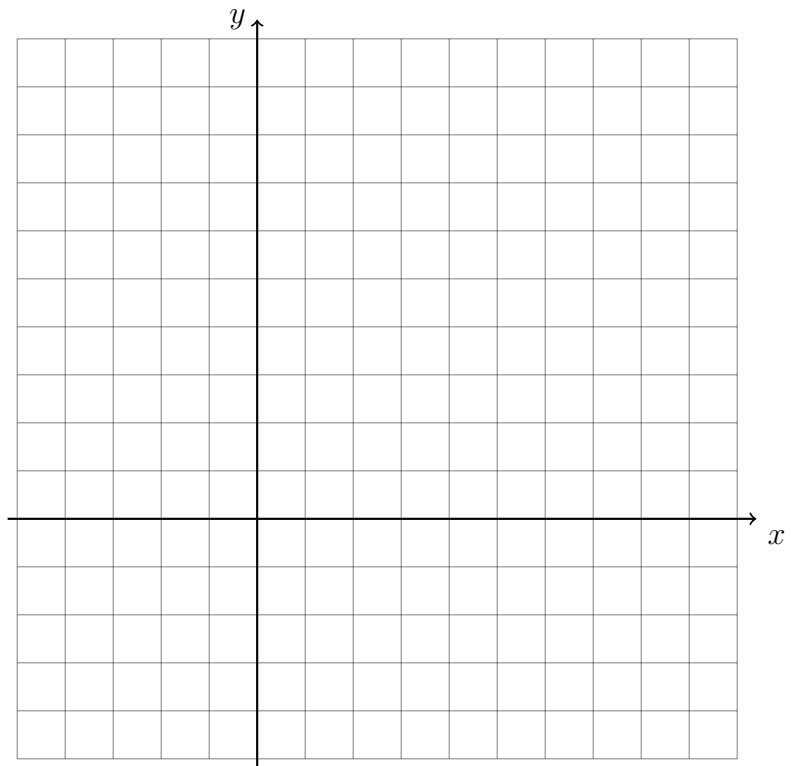Are the lines parallel, perpendicular, or neither? Justify your answer.
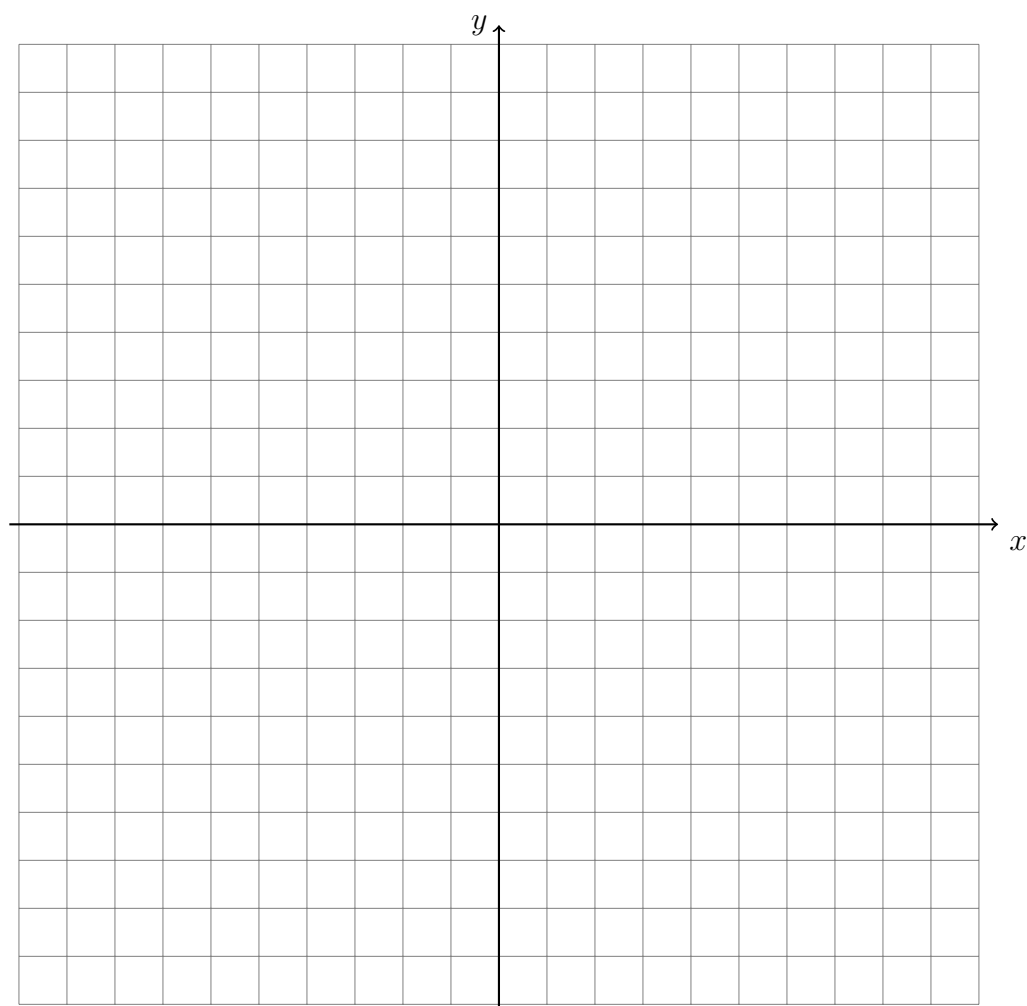
2. Graph and label the two equations. Mark their intersection as an ordered pair.

$y = \frac{1}{2}x + 3$

$y = -2x + 8$

Are the lines parallel, perpendicular, or neither? Justify your answer.

3. Apply a dilation mapping $\triangle ABC \to \triangle A'B'C'$ with a factor of $k = 2$ on the grid, labeling the image.