

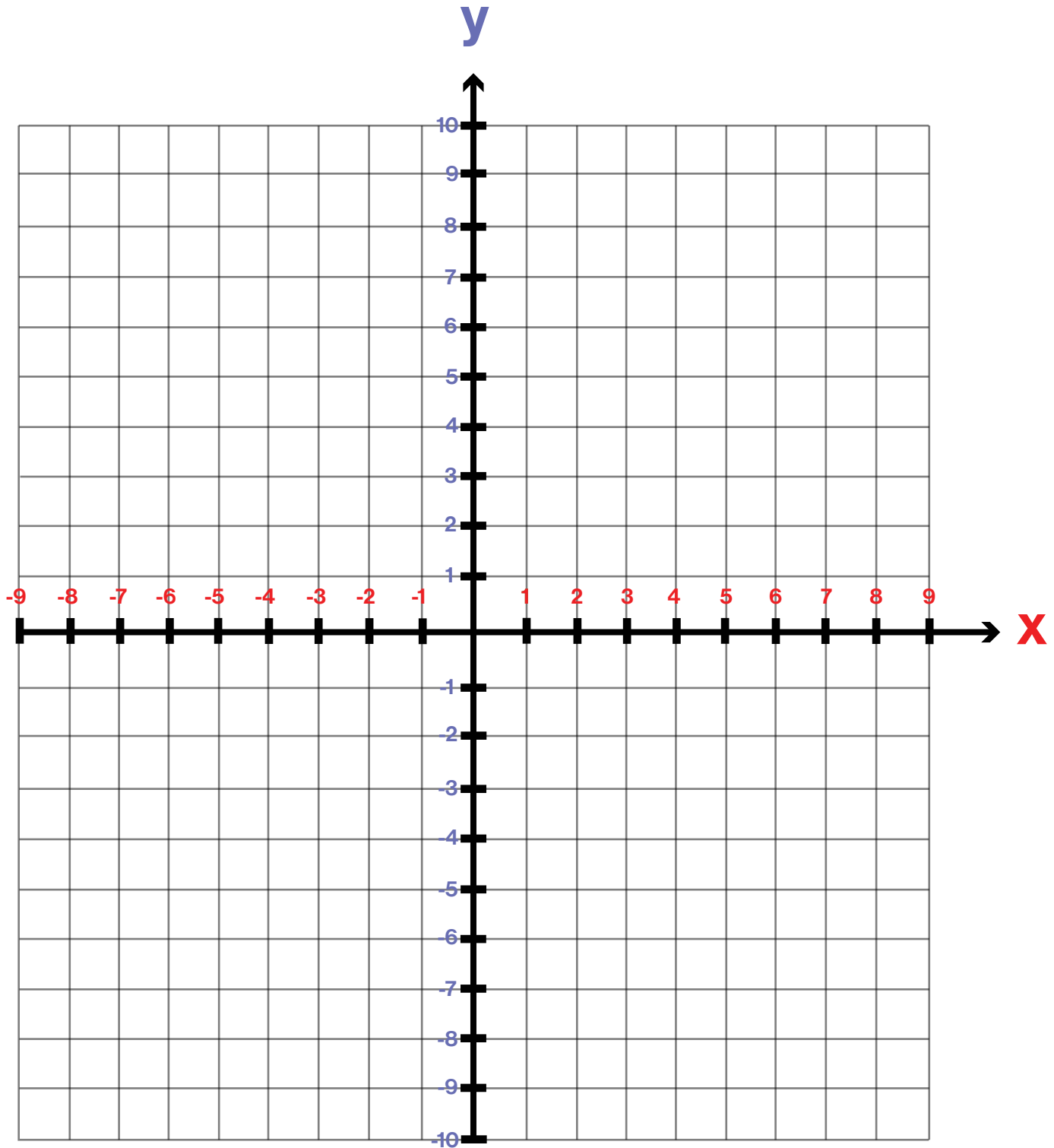
Coordinate Plane Practice

Name: _____

Date: _____

Question 1

Label the quadrants and determine the sign of both coordinates in each quadrant

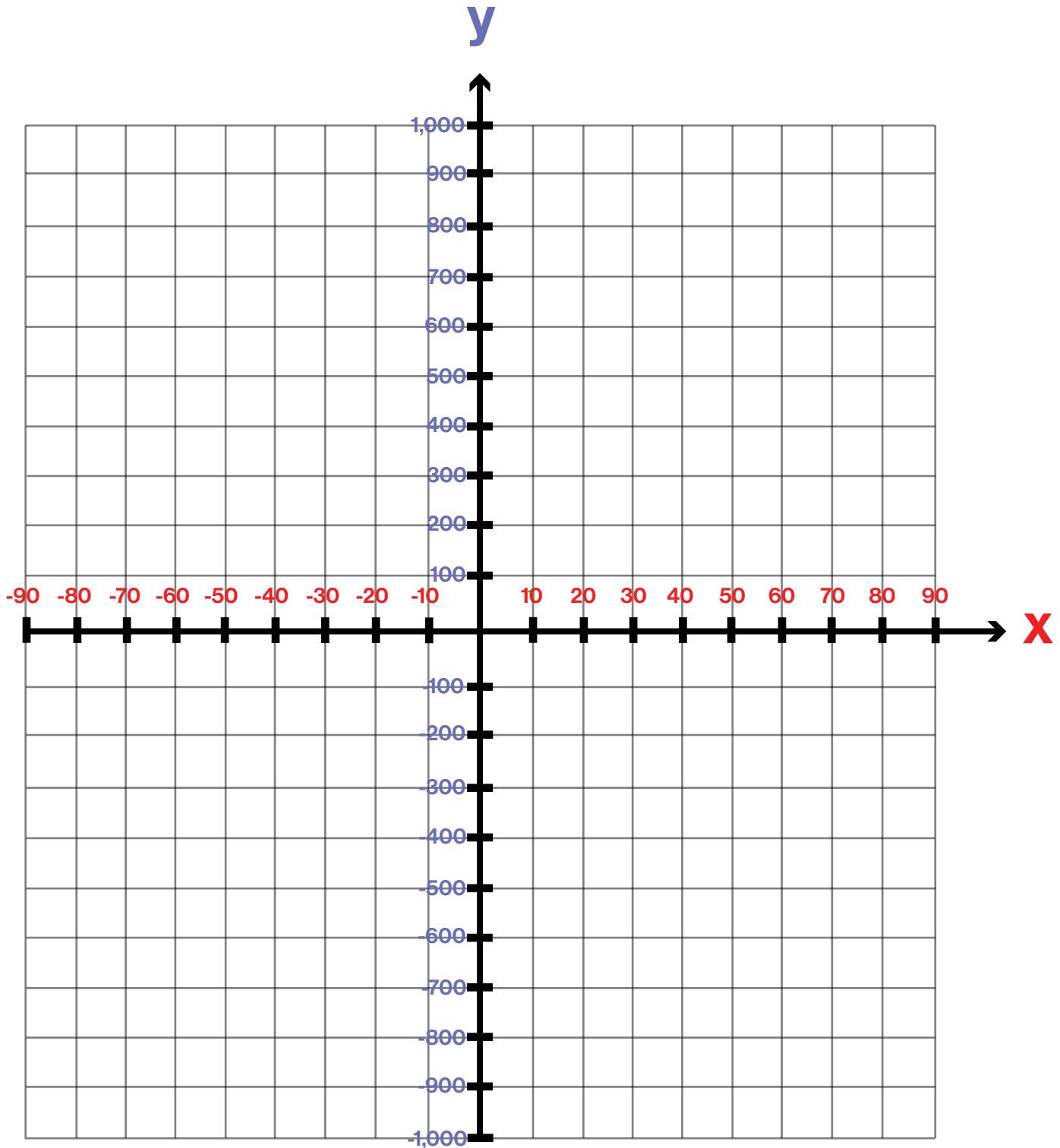


Coordinate Plane Practice

Question 2

Plot the ordered pairs

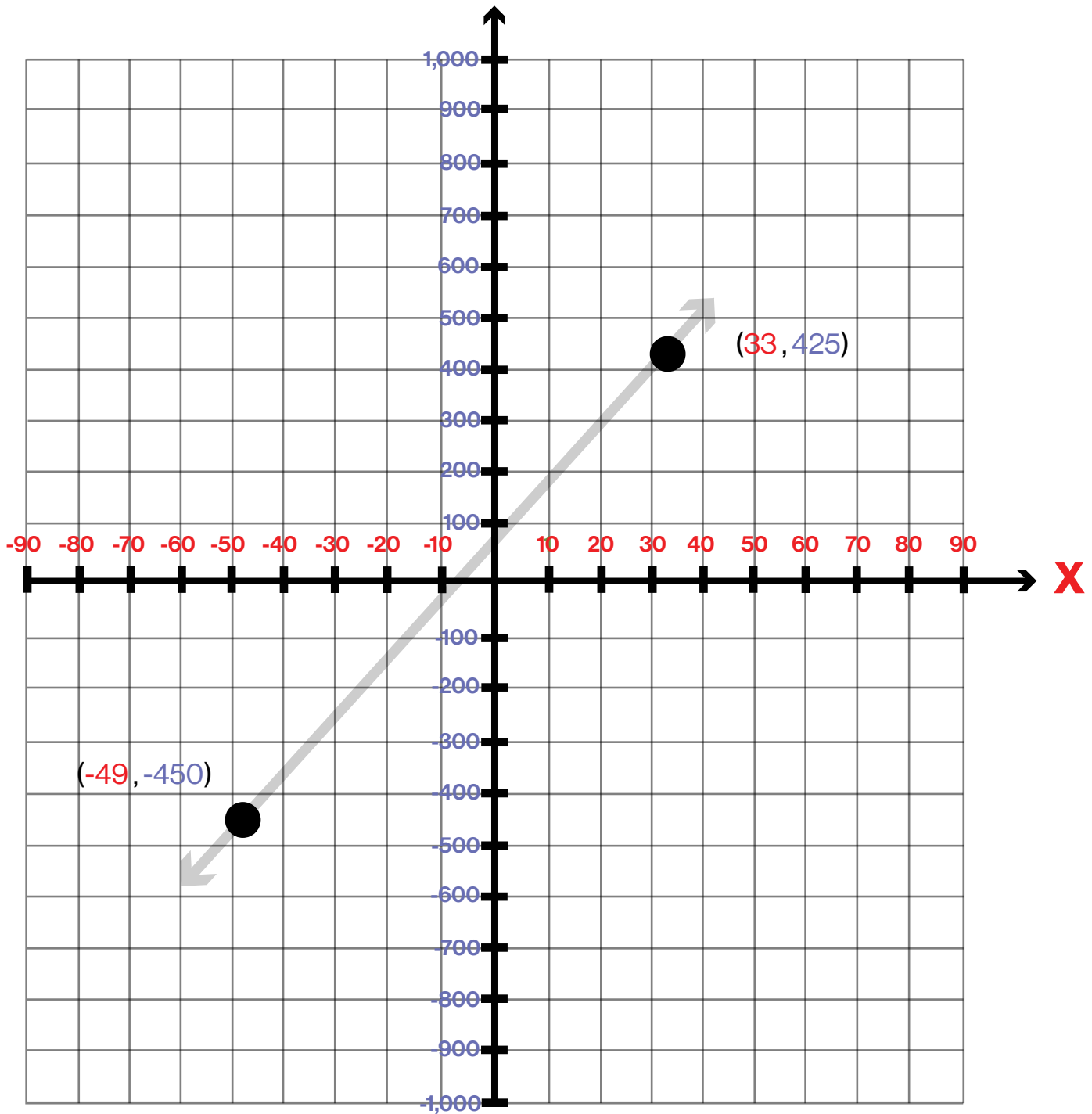
$(-50, 200)$ $(50, 700)$ $(10, -100)$ $(-80, -900)$ $(-15, -150)$ $(90, 0)$ $(40, -950)$ $(-85, 1000)$



Coordinate Plane Practice

Question 3

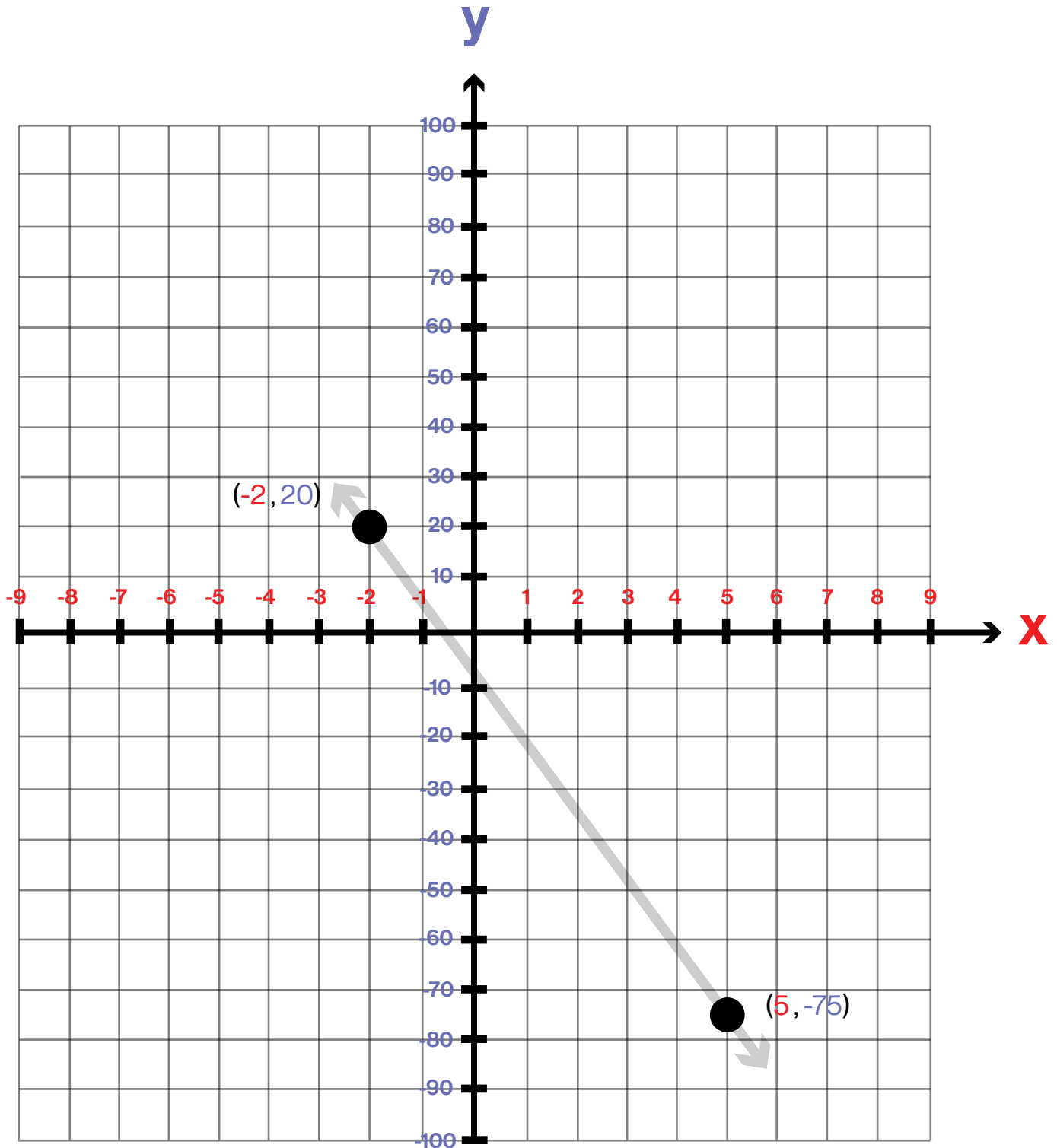
Determine the slope and y-intercept



Coordinate Plane Practice

Question 4

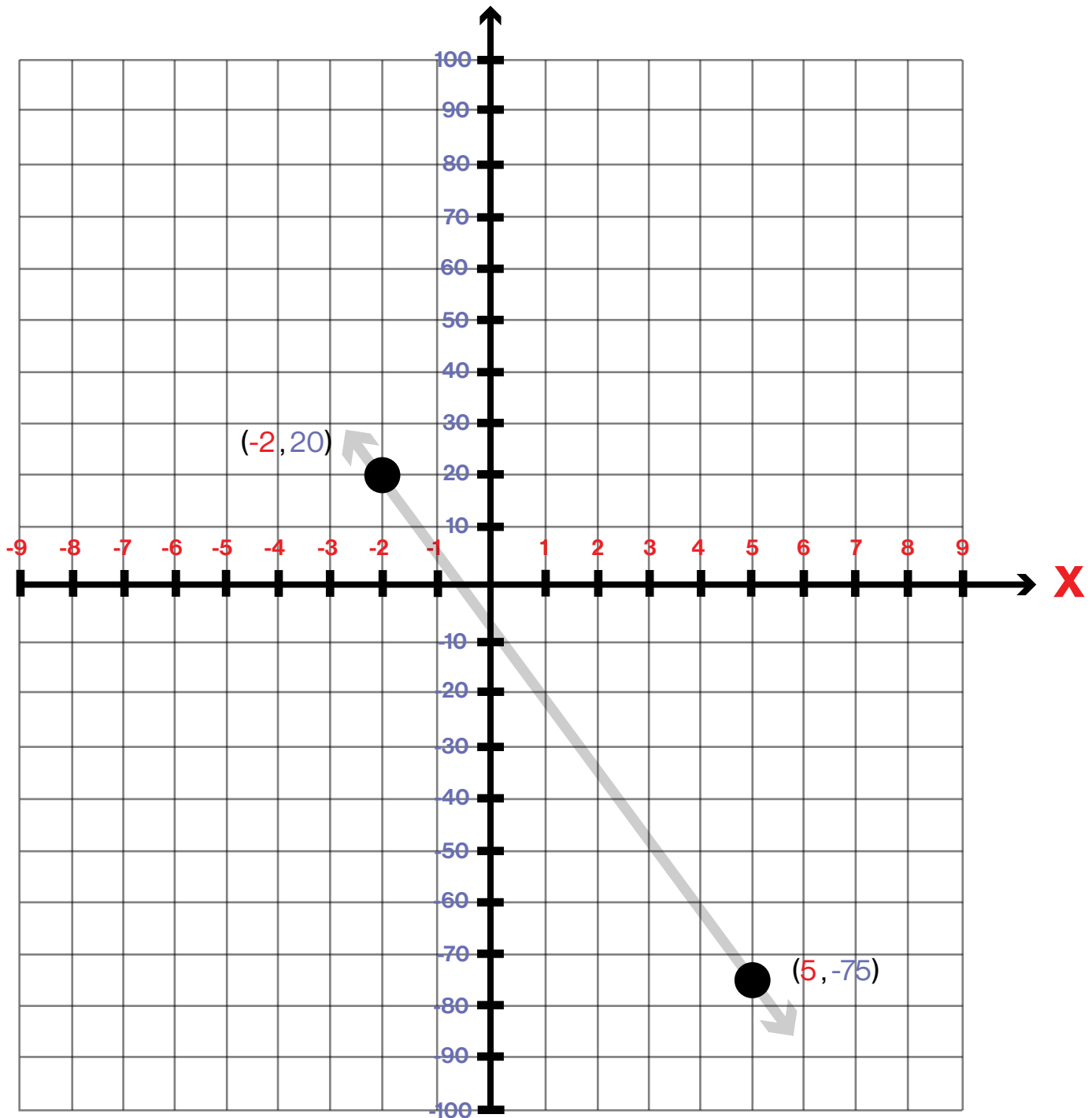
Determine the slope and y-intercept



Coordinate Plane Practice

Question 5

Determine the x-intercept

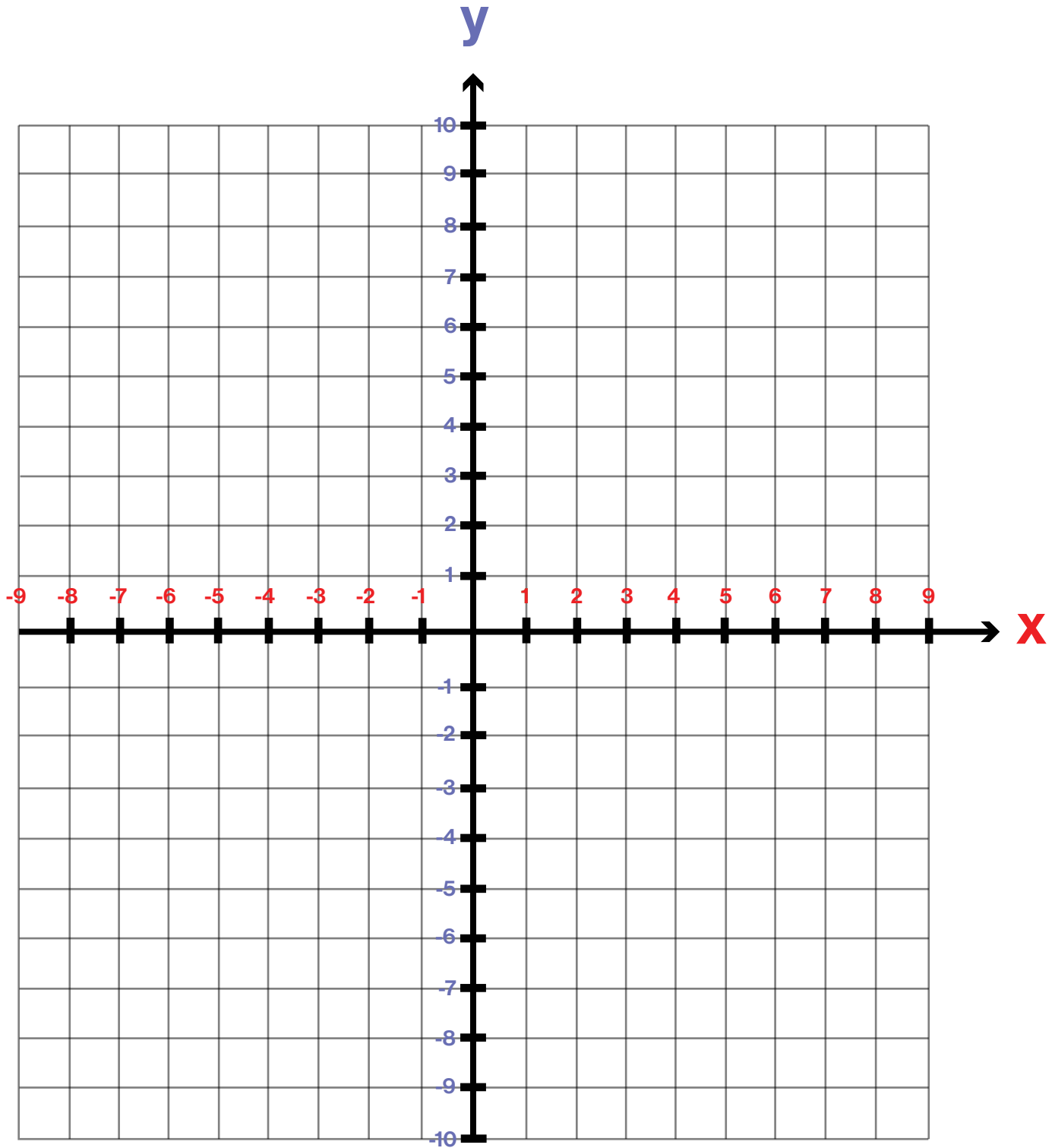


Coordinate Plane Practice

Question 6

Plot the linear equation

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

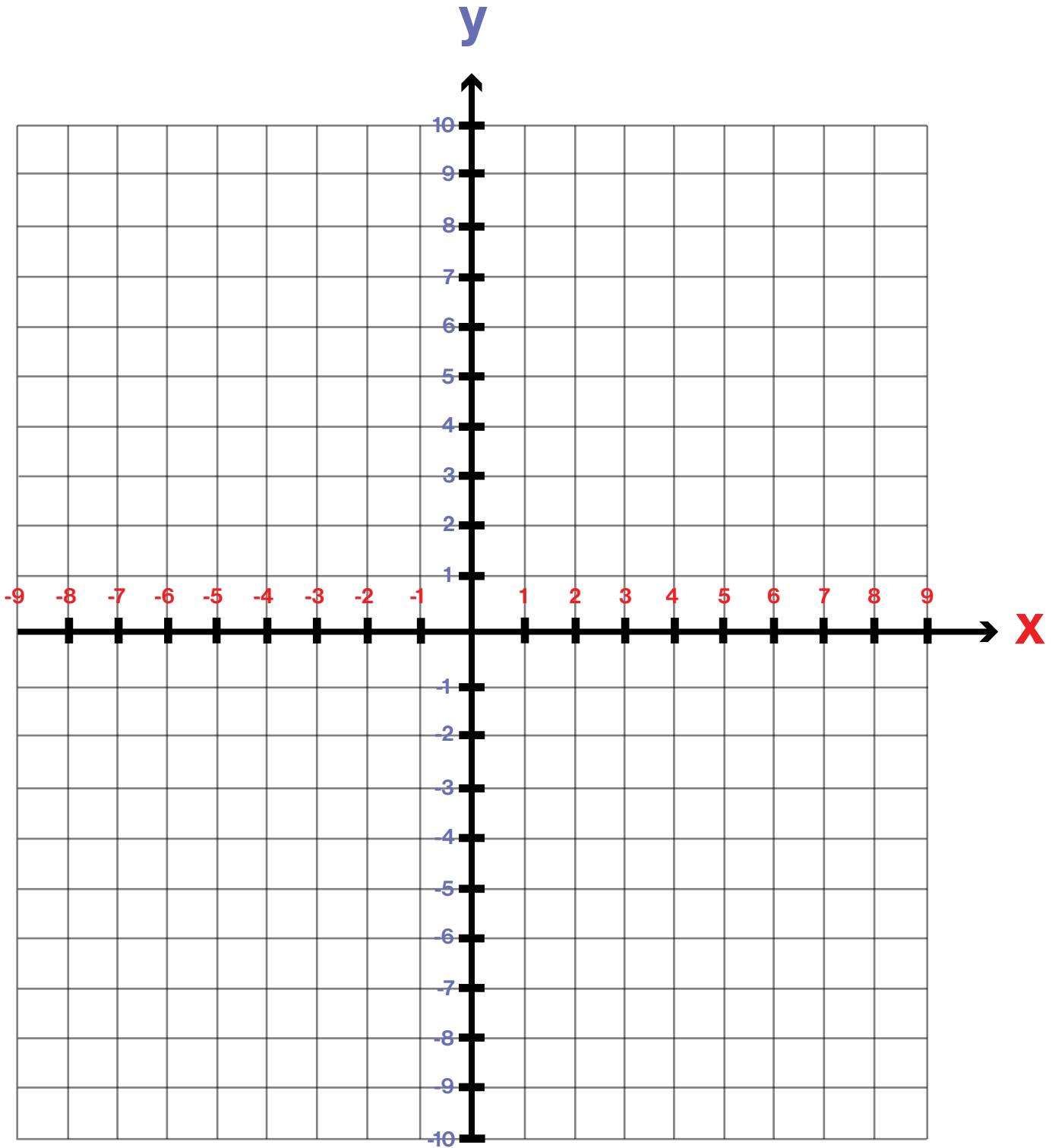


Coordinate Plane Practice

Question 7

Plot the linear equation

$$y - 2 = 3(x - 5)$$

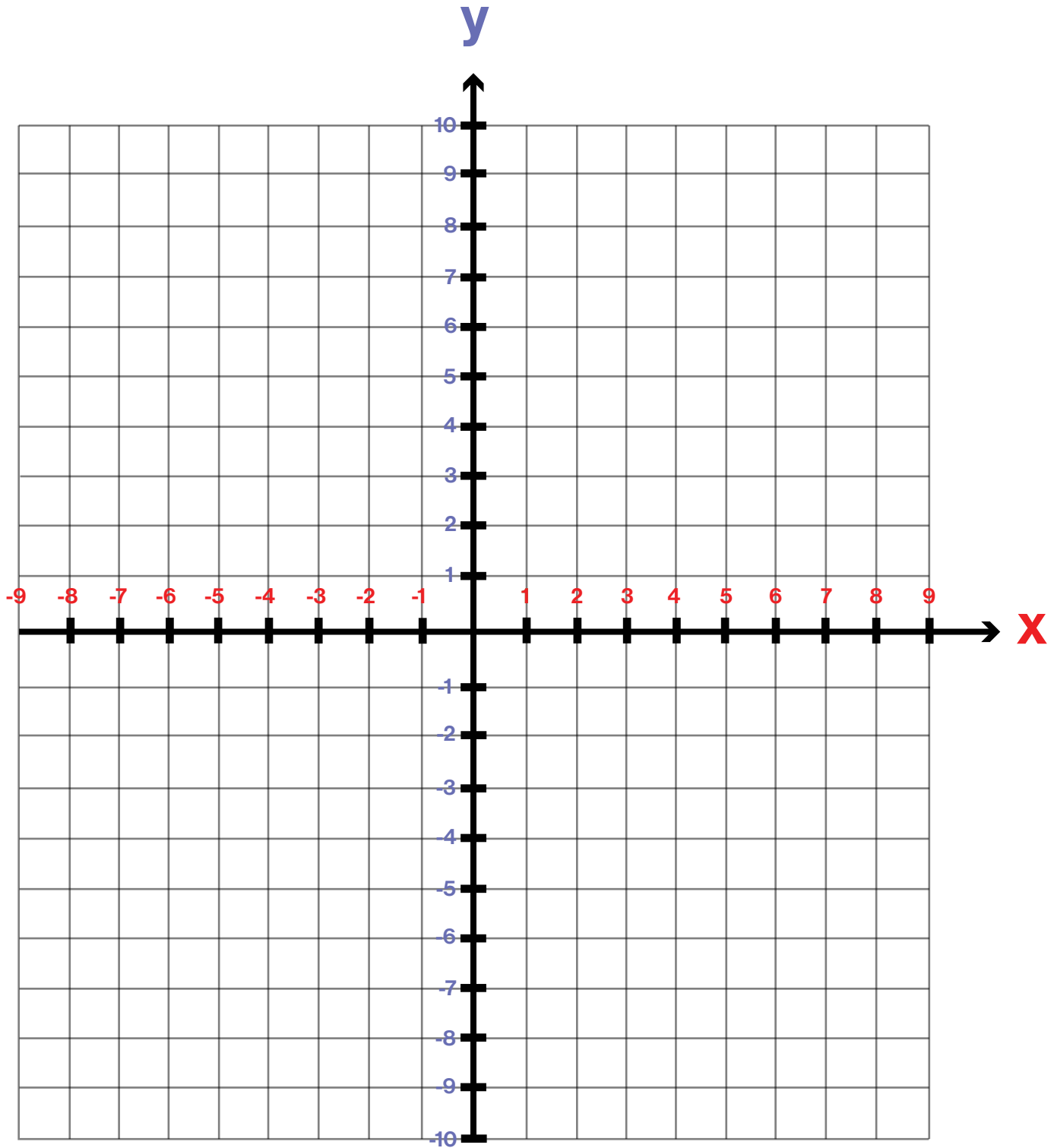


Coordinate Plane Practice

Question 8

Plot the linear equation

$$x + 2y = 6$$

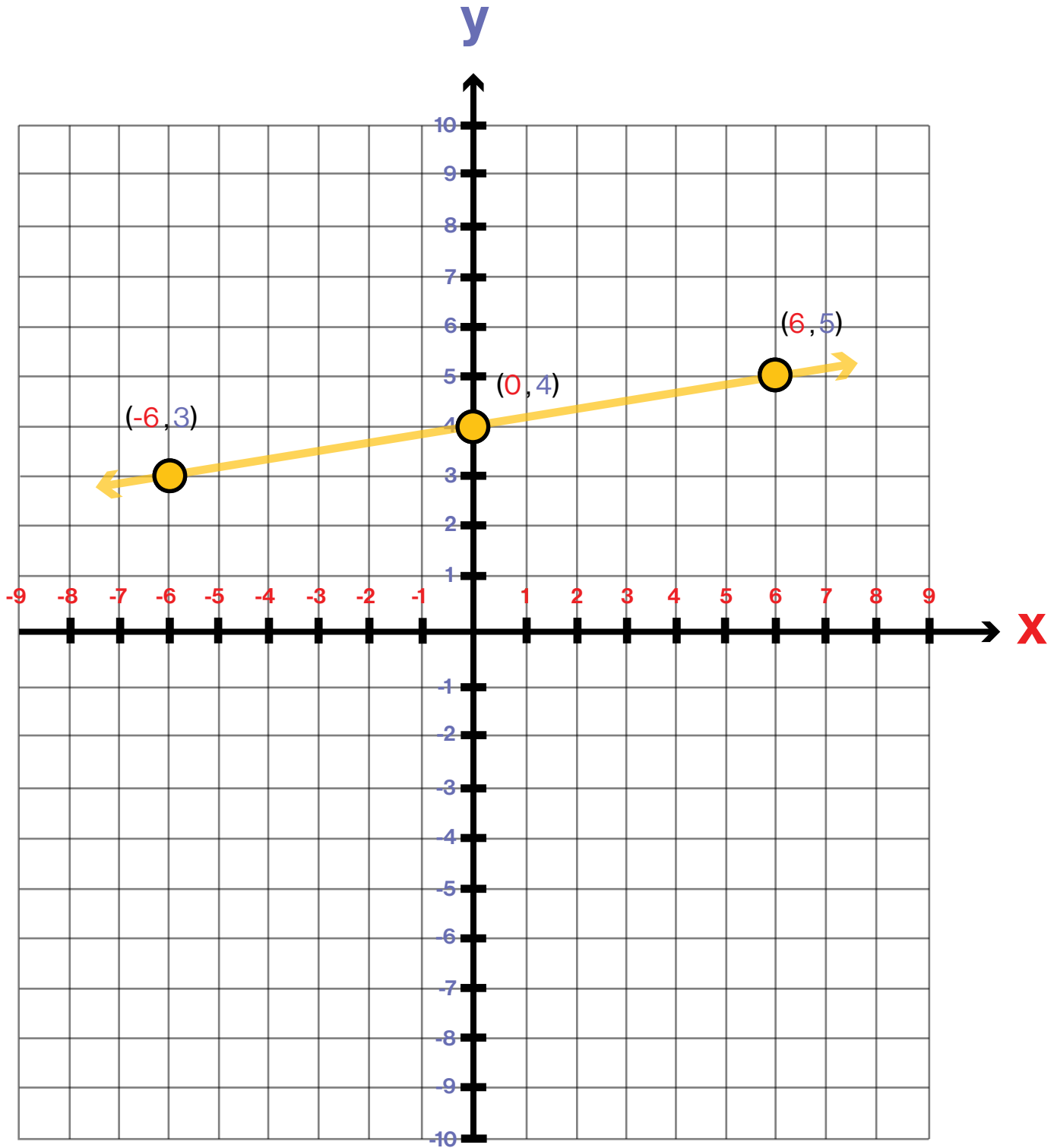


Coordinate Plane Practice

Question 9

Plot a parallel line

$$y = \frac{1}{6}x + 4$$

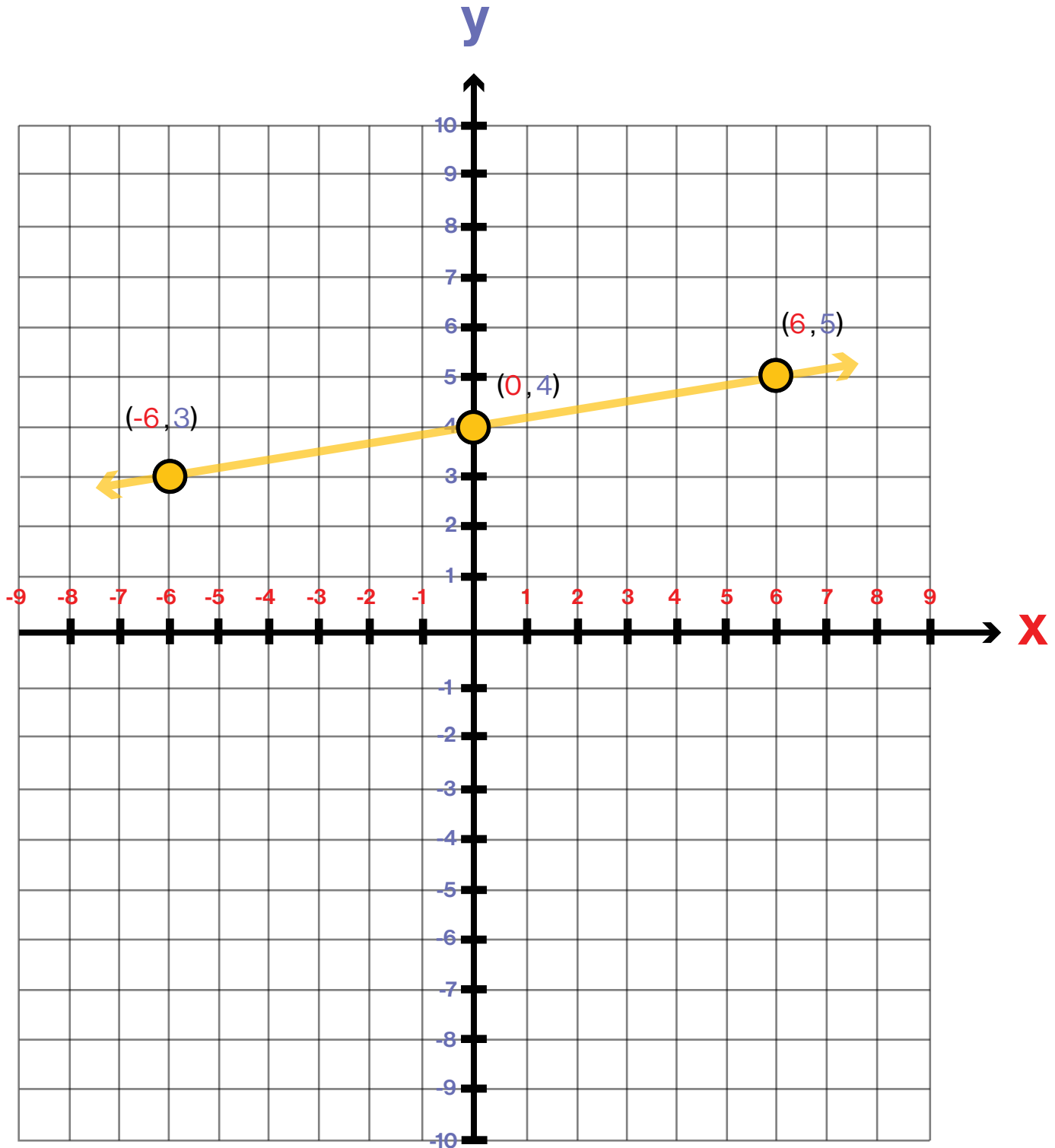


Coordinate Plane Practice

Question 10

Plot a perpendicular line

$$y = \frac{1}{6}x + 4$$



Coordinate Plane Practice

Question 11

Convert

I. slope-intercept

point-slope

standard form

$$y = \frac{2}{3}x + 7$$

II. slope-intercept

point-slope

standard form

$$y - 0 = \frac{1}{2}(x - -4)$$

point: $(-4, 0)$

III. slope-intercept

point-slope

standard form

$$5x - y = -3$$

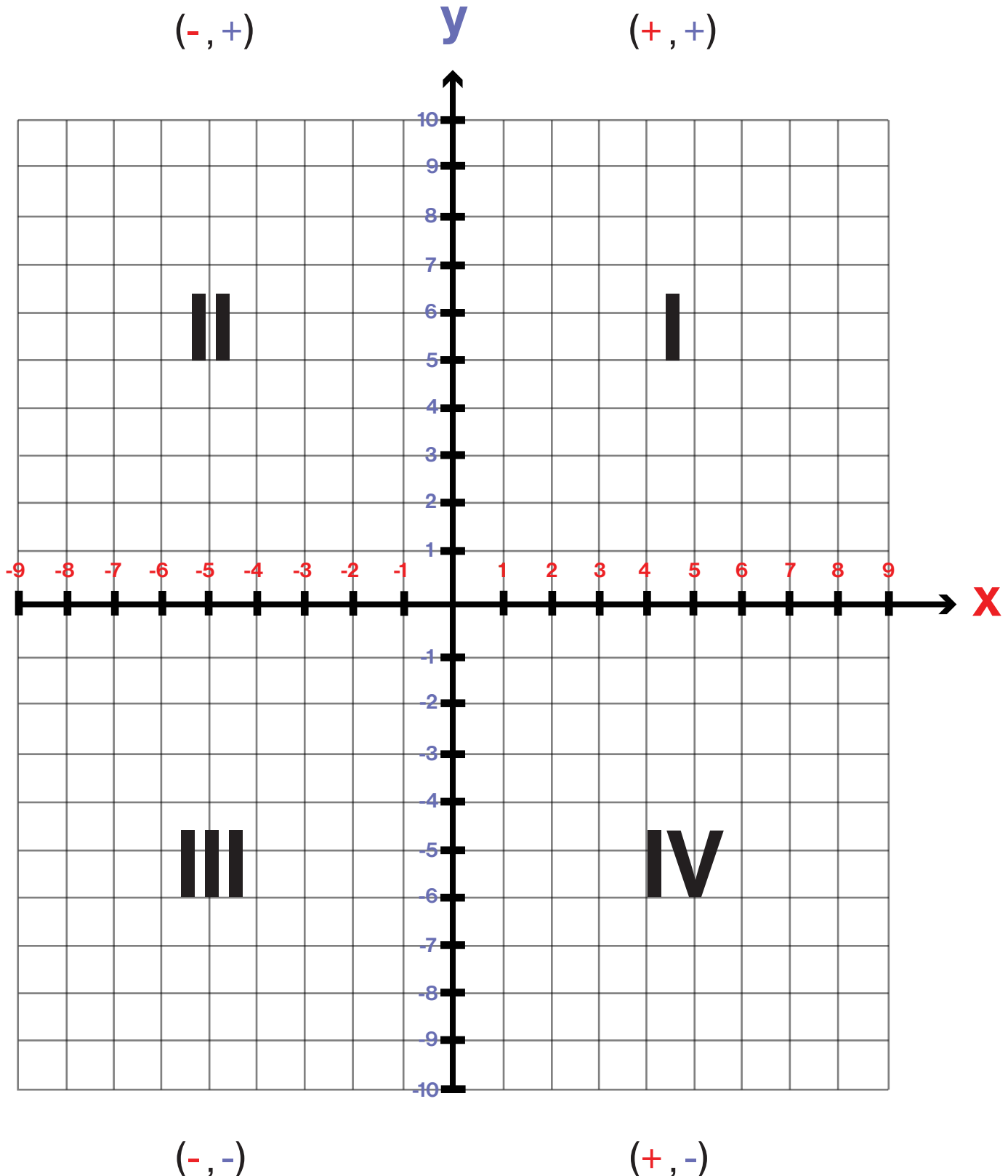
Coordinate Plane Practice

Name: _____ **Key**

Date: _____

Question 1

Label the quadrants and determine the sign of both coordinates in each quadrant

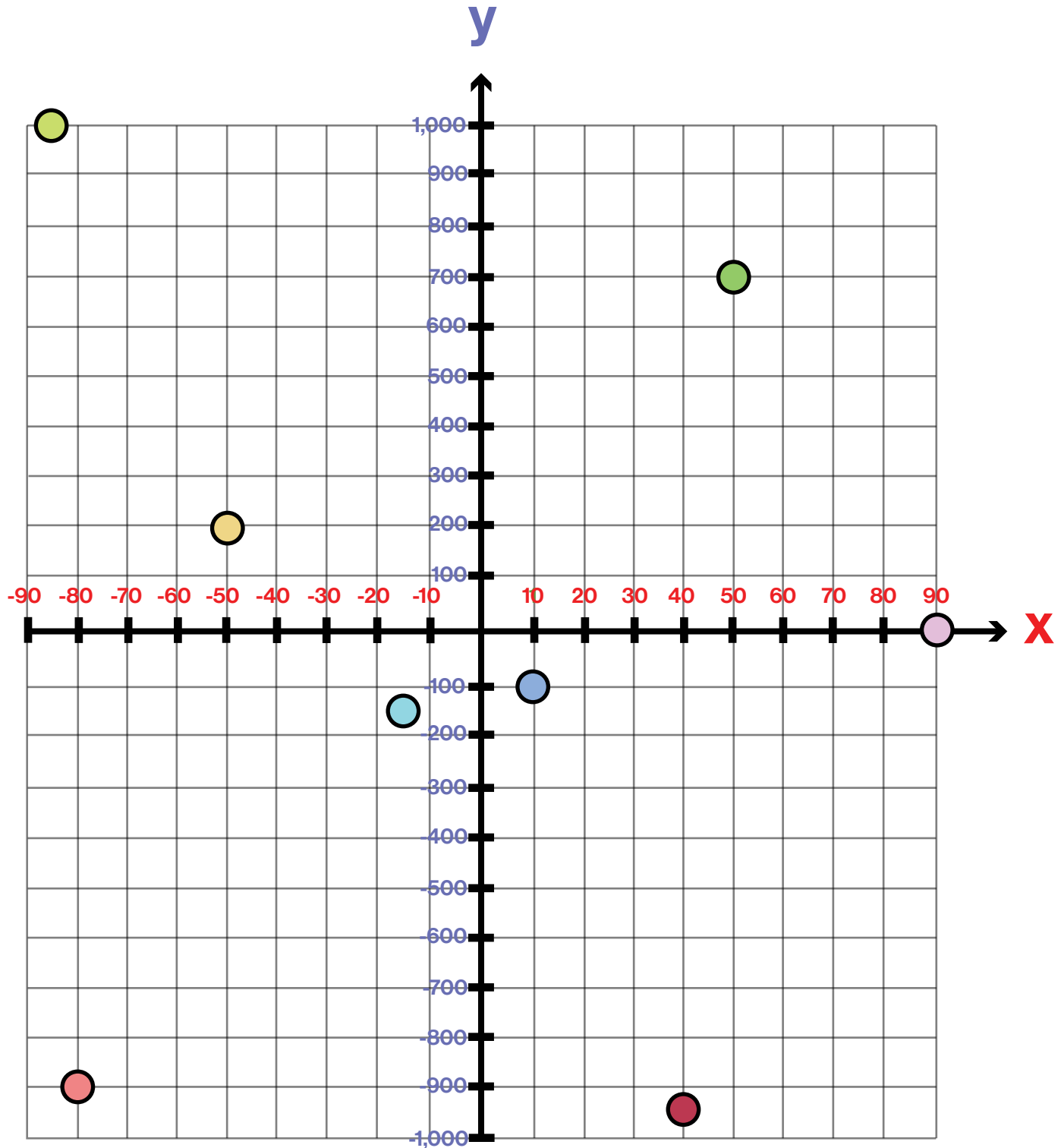


Coordinate Plane Practice

Question 2

Plot the ordered pairs

$(-50, 200)$ $(50, 700)$ $(10, -100)$ $(-80, -900)$ $(-15, -150)$ $(90, 0)$ $(40, -950)$ $(-85, 1000)$



Coordinate Plane Practice

Question 3

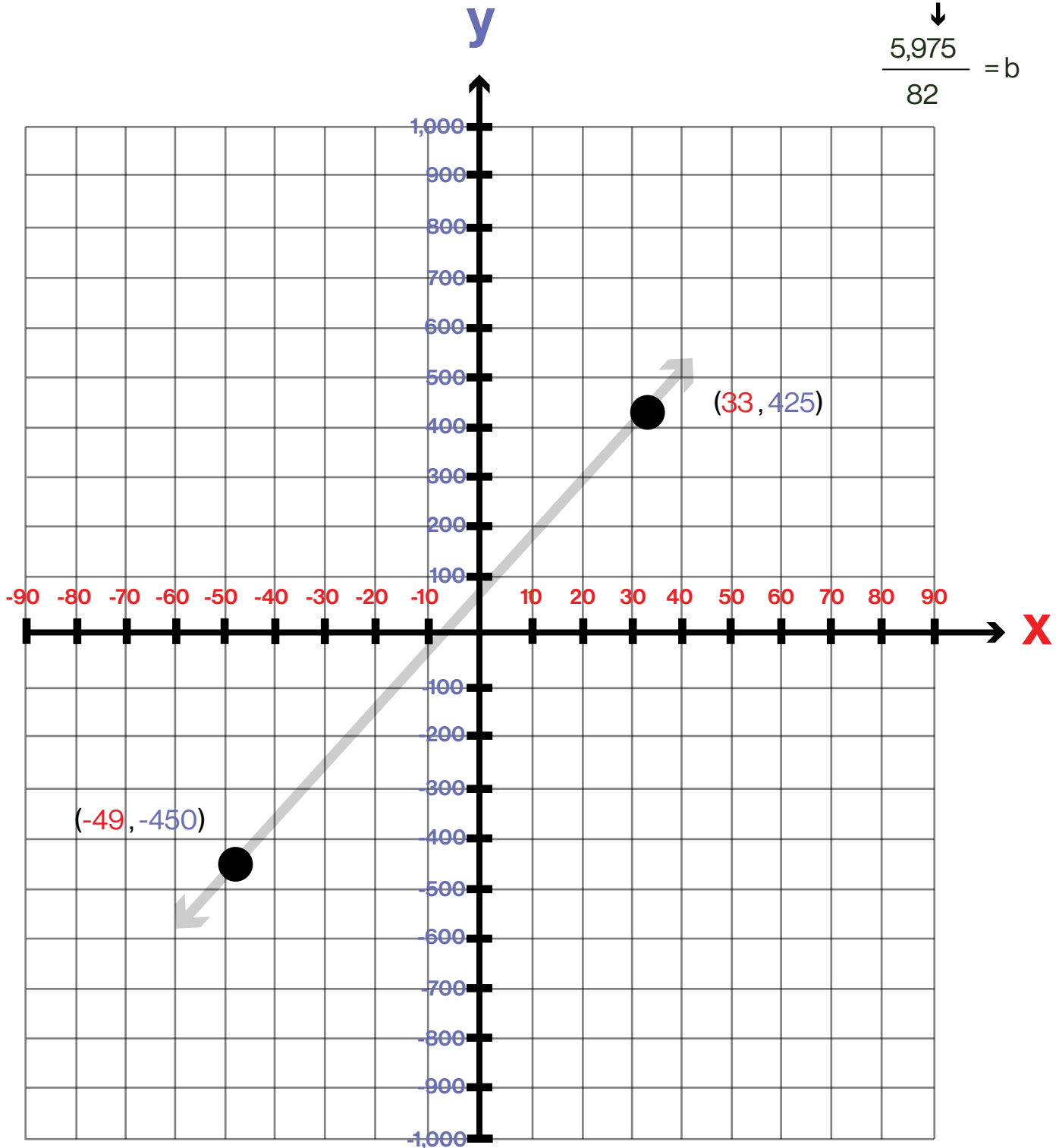
Determine the slope and y-intercept

Slope

$$\frac{425 - (-450)}{33 - (-49)} = \frac{875}{82}$$

y-intercept

$$425 = \frac{875}{82} \cdot 33 + b \rightarrow 425 = \frac{28,875}{82} + b \rightarrow 425 - \frac{28,875}{82} = b$$
$$\downarrow$$
$$\frac{5,975}{82} = b$$



Coordinate Plane Practice

Question 4

Determine the slope and y-intercept

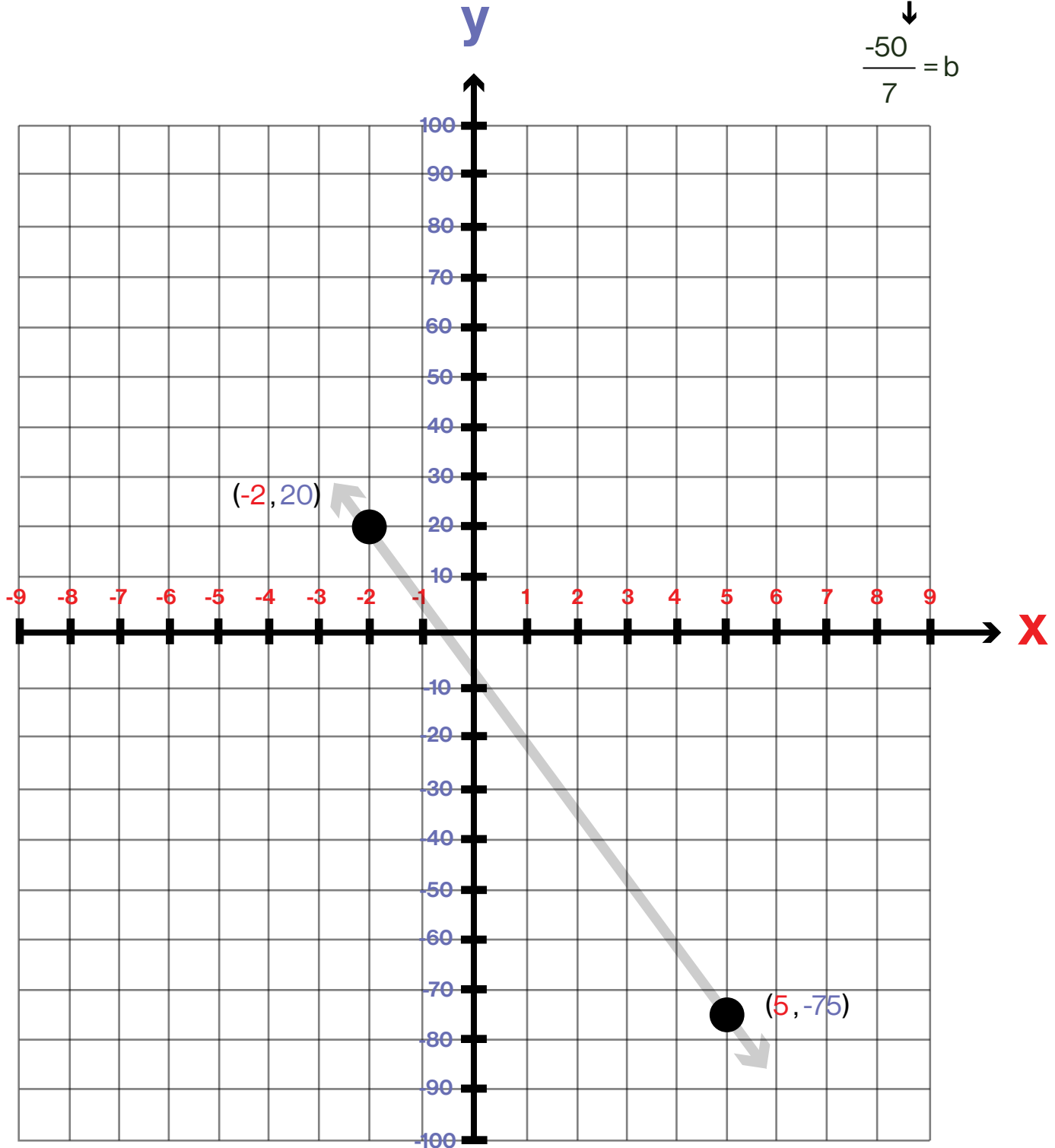
Slope

$$\frac{-75 - 20}{5 - -2} = \frac{-95}{7}$$

y-intercept

$$20 = \frac{-95}{7} \cdot -2 + b \rightarrow 20 = \frac{190}{7} + b \rightarrow 20 - \frac{190}{7} = b$$

$$\downarrow$$
$$\frac{-50}{7} = b$$



Coordinate Plane Practice

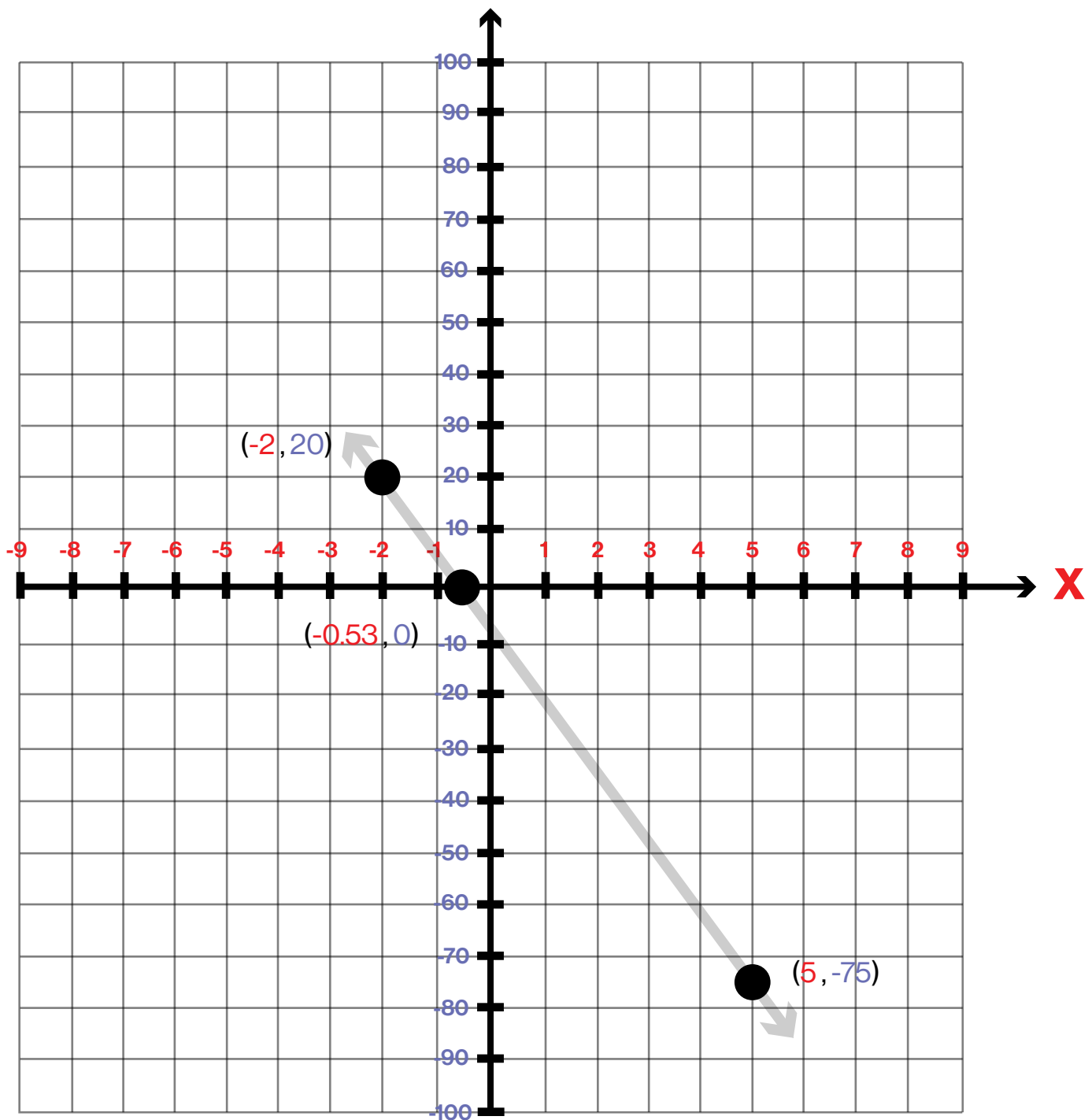
Question 5

Determine the x-intercept

Slope-intercept form

$$y = \frac{-95}{7} \cdot x + \frac{-50}{7} \rightarrow 0 = \frac{-95}{7} \cdot x + \frac{-50}{7} \rightarrow \frac{50}{7} = \frac{-95}{7} \cdot x \rightarrow \frac{-10}{19} = x \rightarrow \left(\frac{-10}{19}, 0 \right)$$

x-intercept

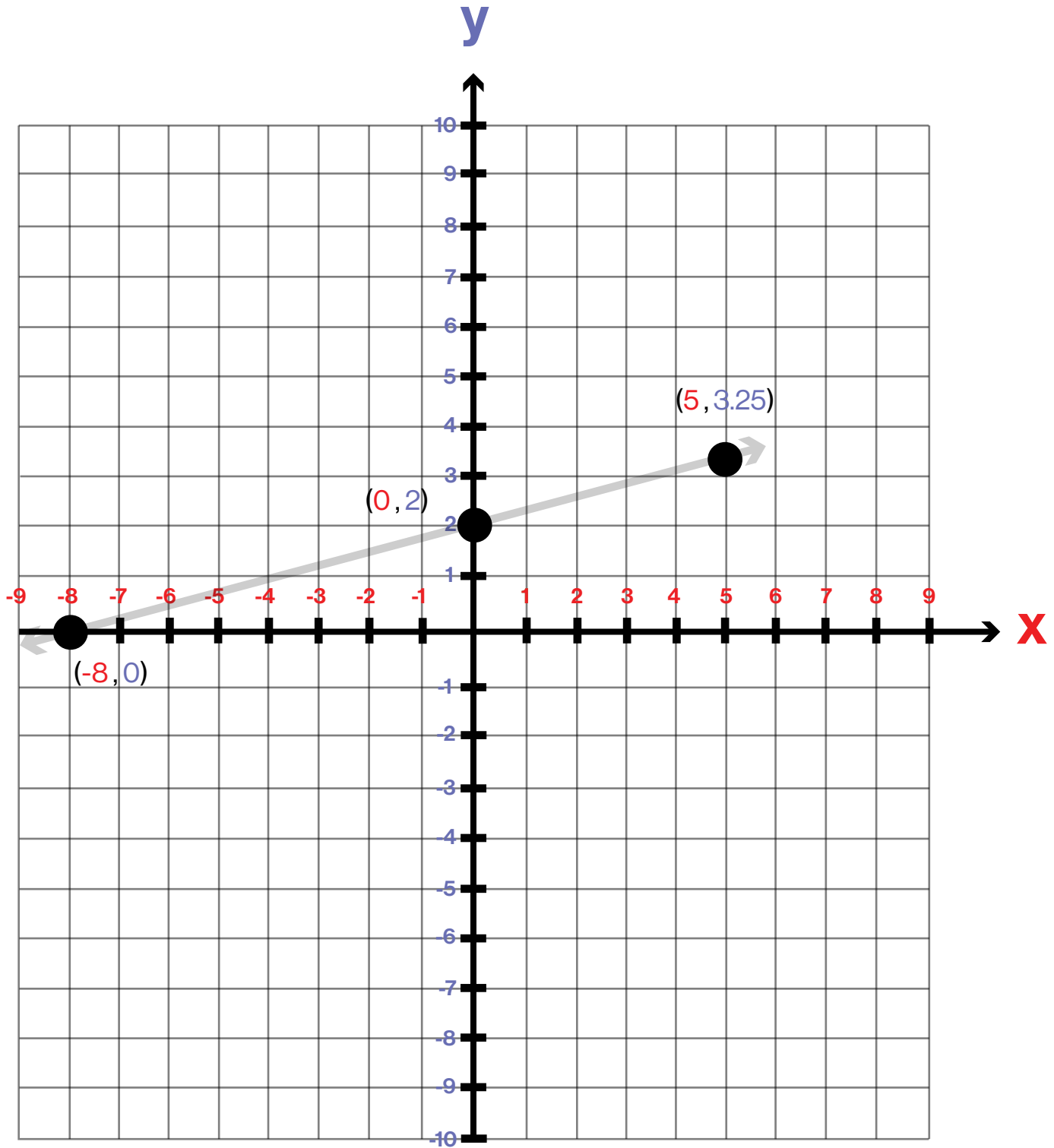


Coordinate Plane Practice

Question 6

Plot the linear equation

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

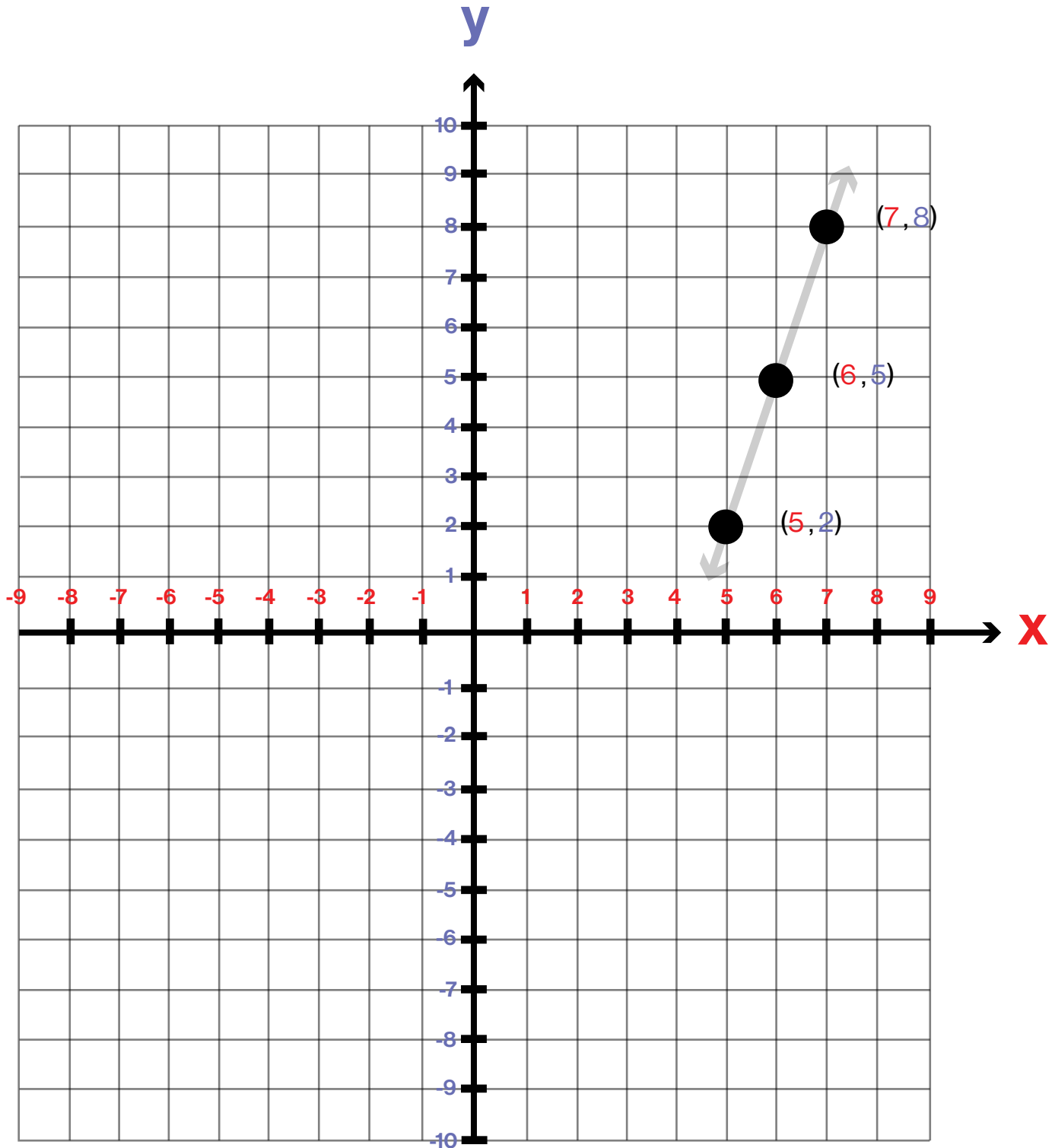


Coordinate Plane Practice

Question 7

Plot the linear equation

$$y - 2 = 3(x - 5) \rightarrow y - 2 = 3x - 15 \rightarrow y = 3x - 13$$

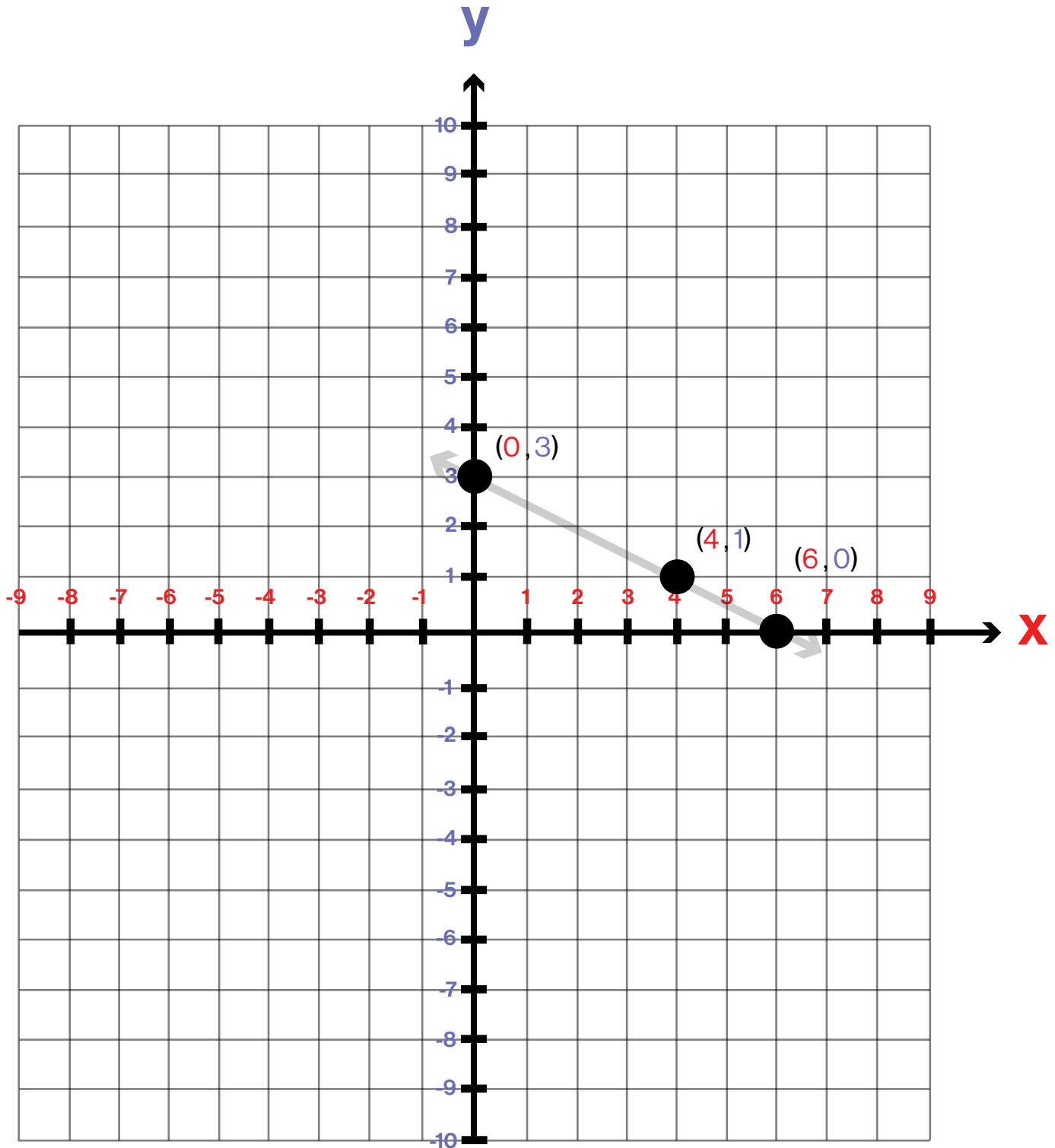


Coordinate Plane Practice

Question 8

Plot the linear equation

$$x + 2y = 6 \rightarrow 2y = 6 - x \rightarrow y = \frac{6 - x}{2} \rightarrow y = 3 - \frac{x}{2} \rightarrow y = 3 + \frac{-x}{2} \rightarrow y = \frac{-x}{2} + 3$$



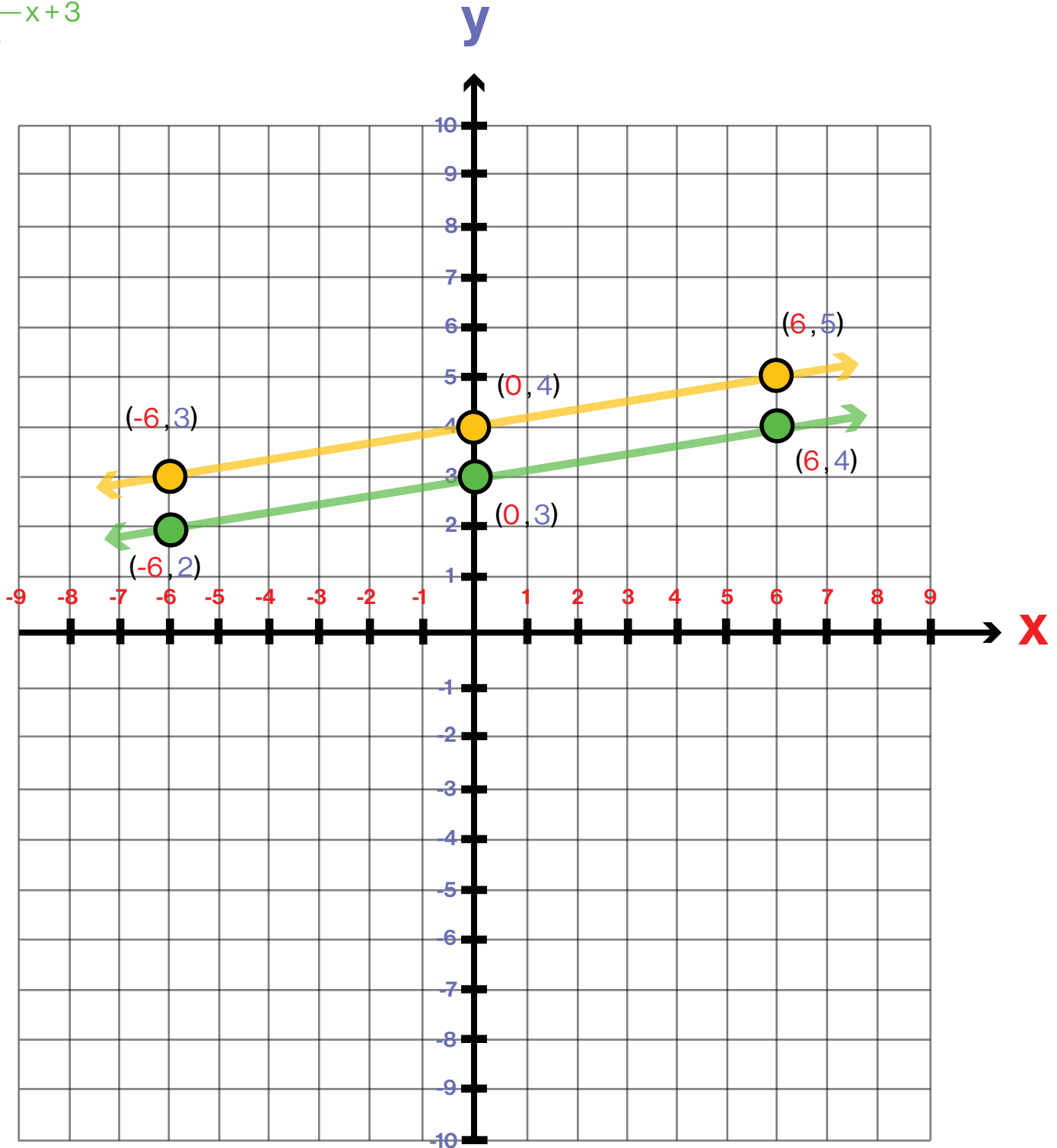
Coordinate Plane Practice

Question 9

Plot a parallel line

$$y = \frac{1}{6}x + 4$$

$$y = \frac{1}{6}x + 3$$



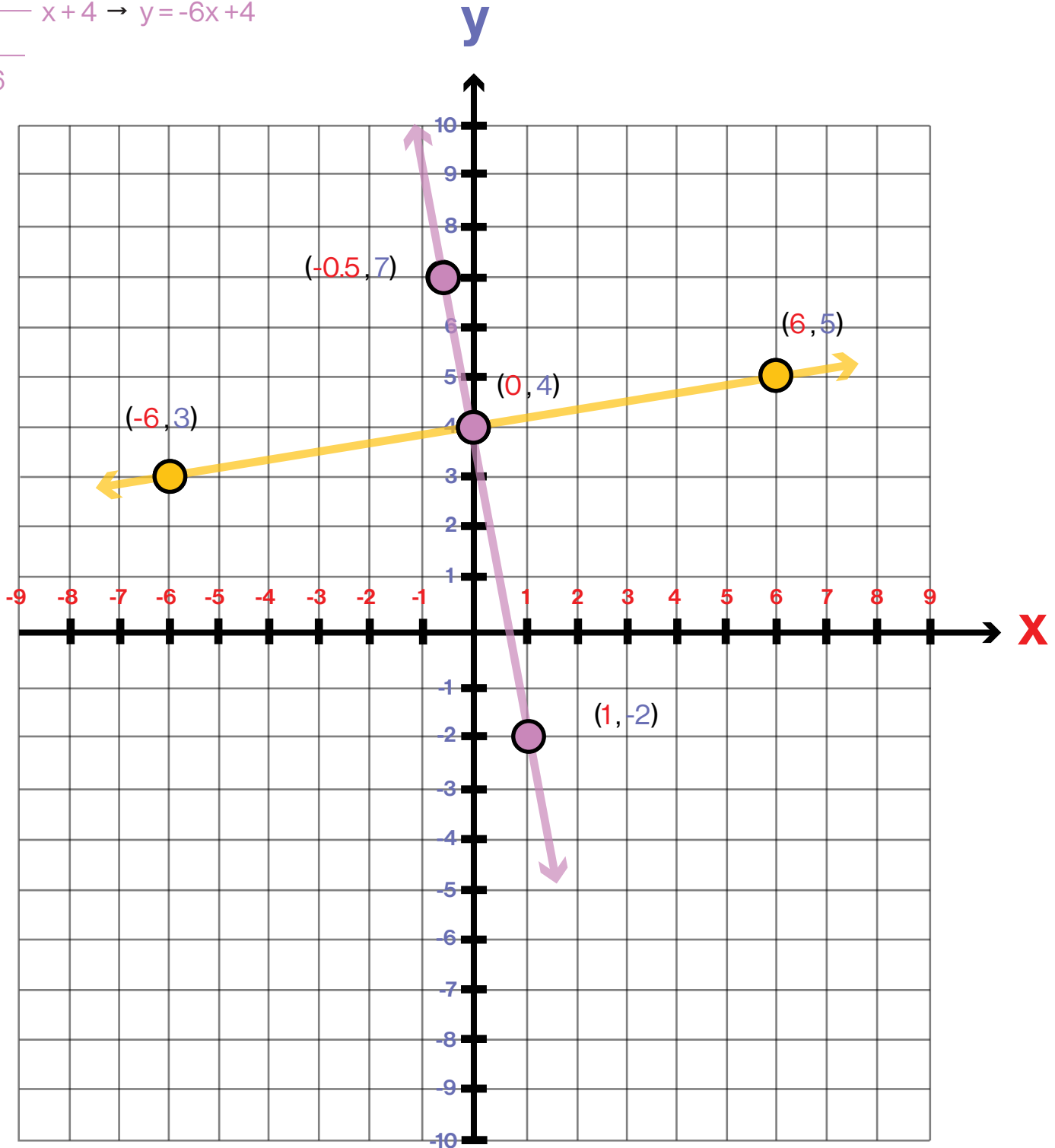
Coordinate Plane Practice

Question 10

Plot a perpendicular line

$$y = \frac{1}{6}x + 4$$

$$y = \frac{-1}{\frac{1}{6}}x + 4 \rightarrow y = -6x + 4$$



Coordinate Plane Practice

Question 11

Convert

I. slope-intercept

$$y = \frac{2}{3}x + 7$$

point-slope

$$y - y_1 = \frac{2}{3}(x + x_1)$$

↓

$$y - 7 = \frac{2}{3}(x + 0)$$

point: (0, 7)

standard form

$$y = \frac{2}{3}x + 7$$

↓

$$3y = 3\left(\frac{2}{3}x + 7\right)$$

↓

$$3y = 2x + 21$$

↓

$$3y - 21 = 2x$$

↓

$$-21 = 2x - 3y$$

II. slope-intercept

$$y - 0 = \frac{1}{2}(x - -4)$$

↓

$$y = \frac{x}{2} - -2$$

↓

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

point-slope

$$y - 0 = \frac{1}{2}(x - -4)$$

point: (-4, 0)

standard form

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

↓

$$2y = 2\left(\frac{x}{2} + 2\right)$$

↓

$$2y = x + 4$$

↓

$$2y - 4 = x$$

↓

$$-4 = x - 2y$$

III. slope-intercept

$$5x - y = -3$$

↓

$$5x = -3 + y$$

↓

$$5x + 3 = y$$

↓

$$y = 5x + 3$$

point-slope

$$y - y_1 = 5(x - x_1)$$

↓

$$y - 3 = 5(x - 0)$$

point: (0, 3)

standard form

$$5x - y = -3$$