

Writing the Equation of a Line Using the Slope-Intercept Form

Overview of problems



Example Set: A

Write an equation of a line given the slope and y-intercept

$$\text{Slope} = 4 \quad y\text{-intercept} = -1$$

$$\text{Slope} = \frac{2}{3} \quad y\text{-intercept} = 2$$

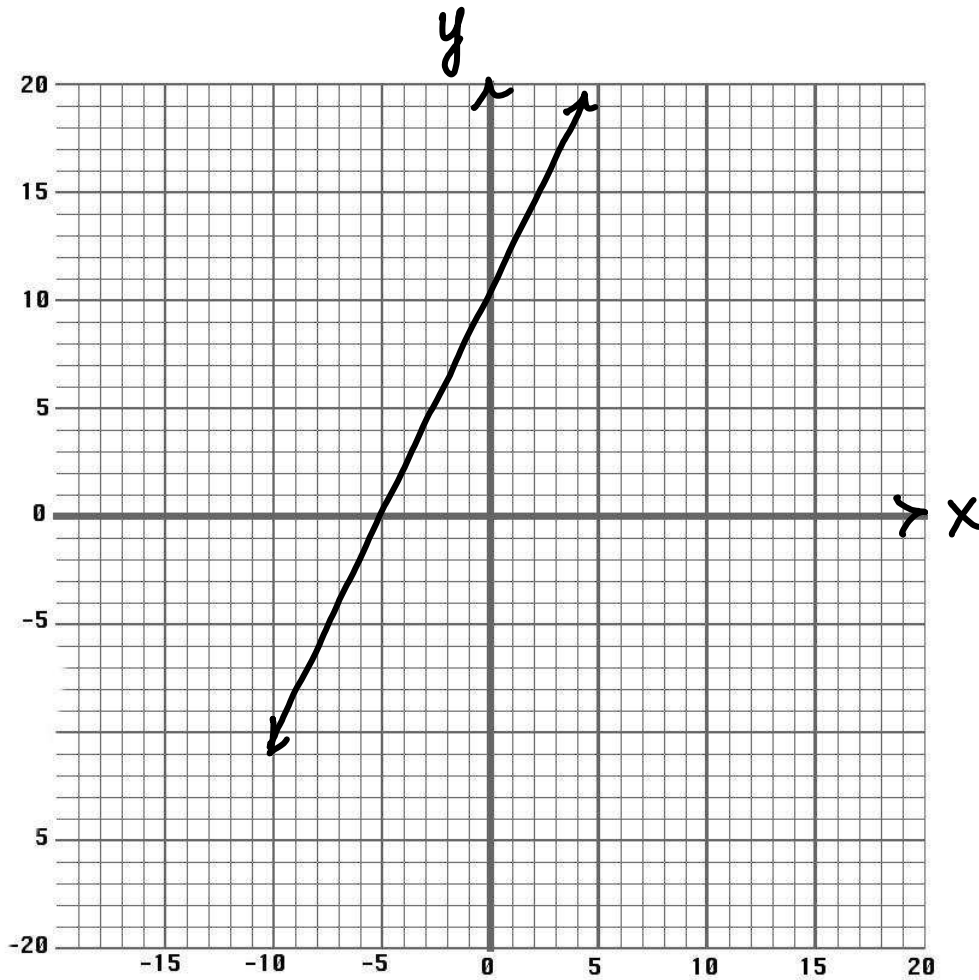
$$\text{Slope} = -1 \quad y\text{-intercept} = 0$$

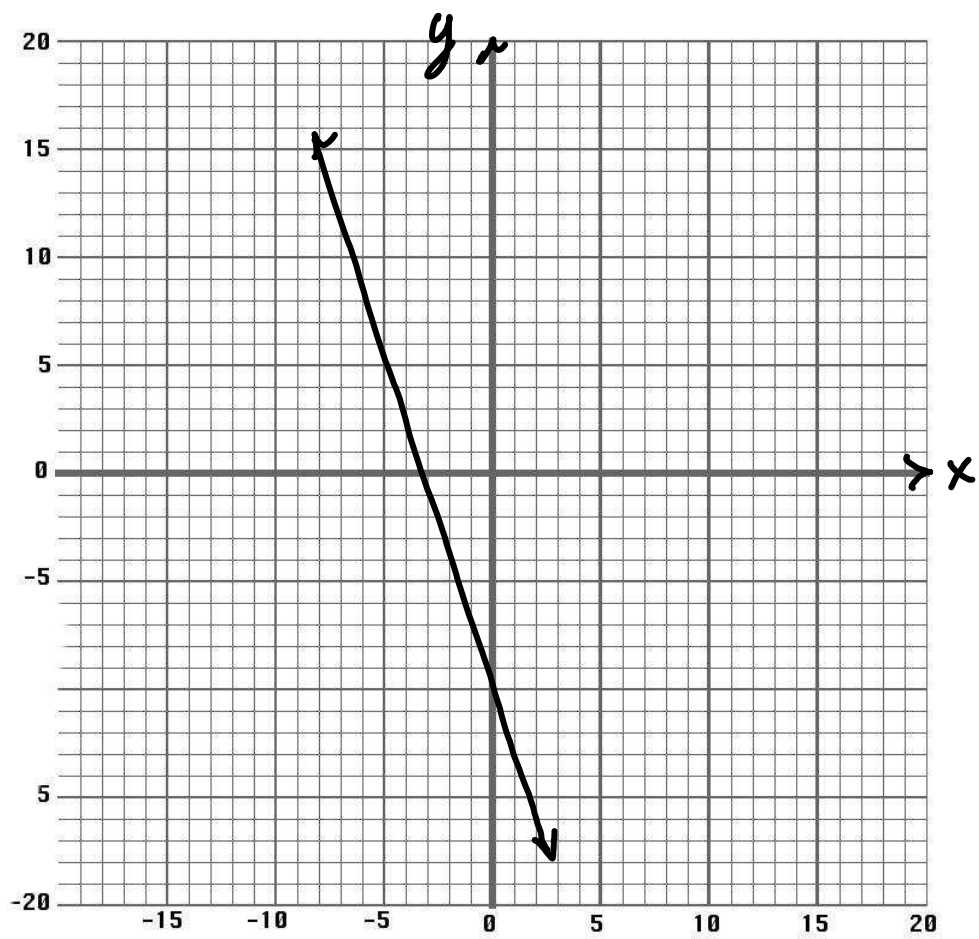
$$\text{Slope} = -\frac{1}{4} \quad y\text{-intercept} = 7$$



Example Set: B

Use the graph to write the equation of the line





Writing the Equation of a Line Using the Slope-Intercept Form

Overview of problems- KEY



Example Set: A

Write an equation of a line given the slope and y-intercept

$$\text{Slope} = 4 \quad y\text{-intercept} = -1 \quad y = 4x + -1$$

$$\text{Slope} = \frac{2}{3} \quad y\text{-intercept} = 2 \quad y = \frac{2}{3}x + 2$$

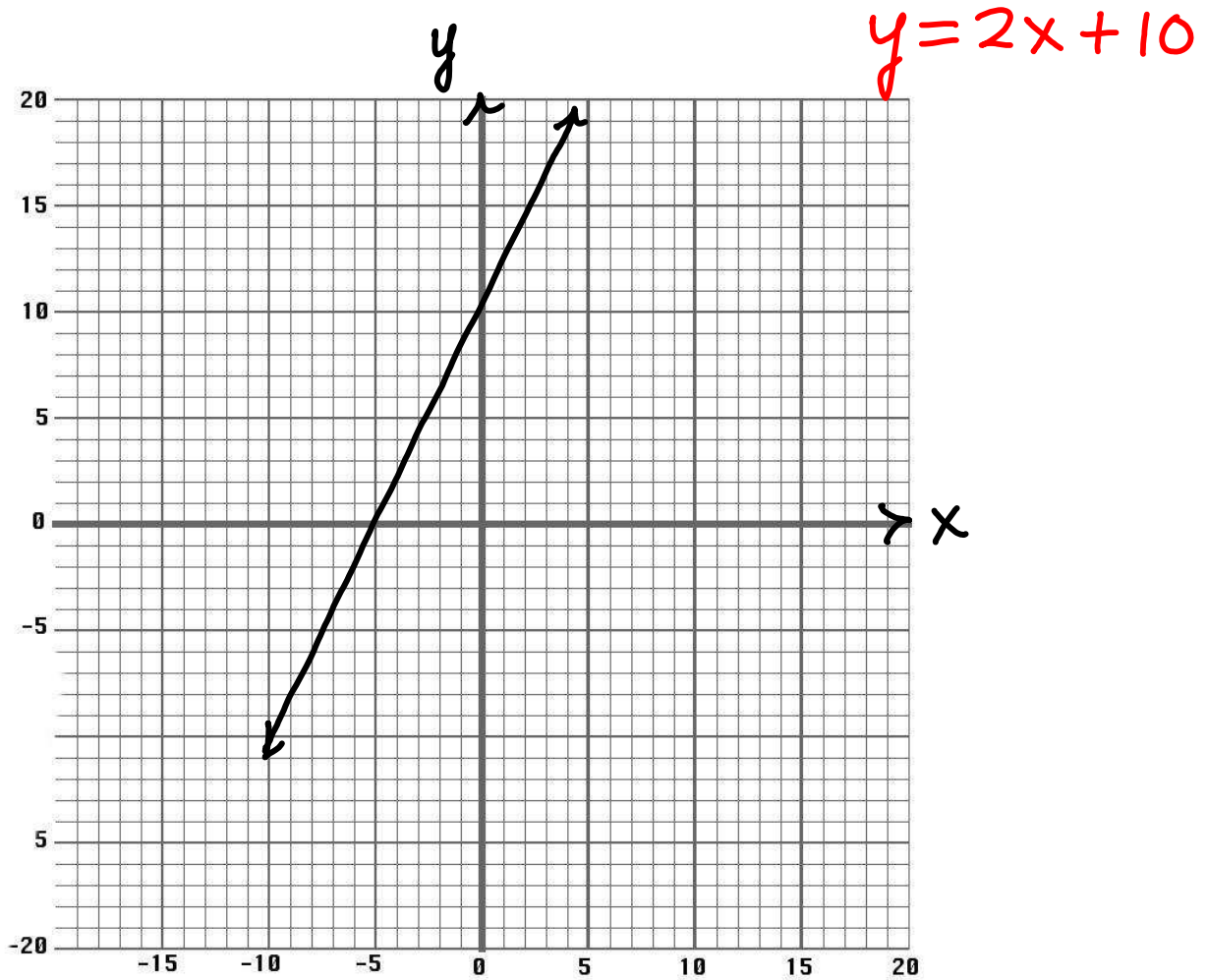
$$\text{Slope} = -1 \quad y\text{-intercept} = 0 \quad y = -1x$$

$$\text{Slope} = -\frac{1}{4} \quad y\text{-intercept} = 7 \quad y = -\frac{1}{4}x + 7$$

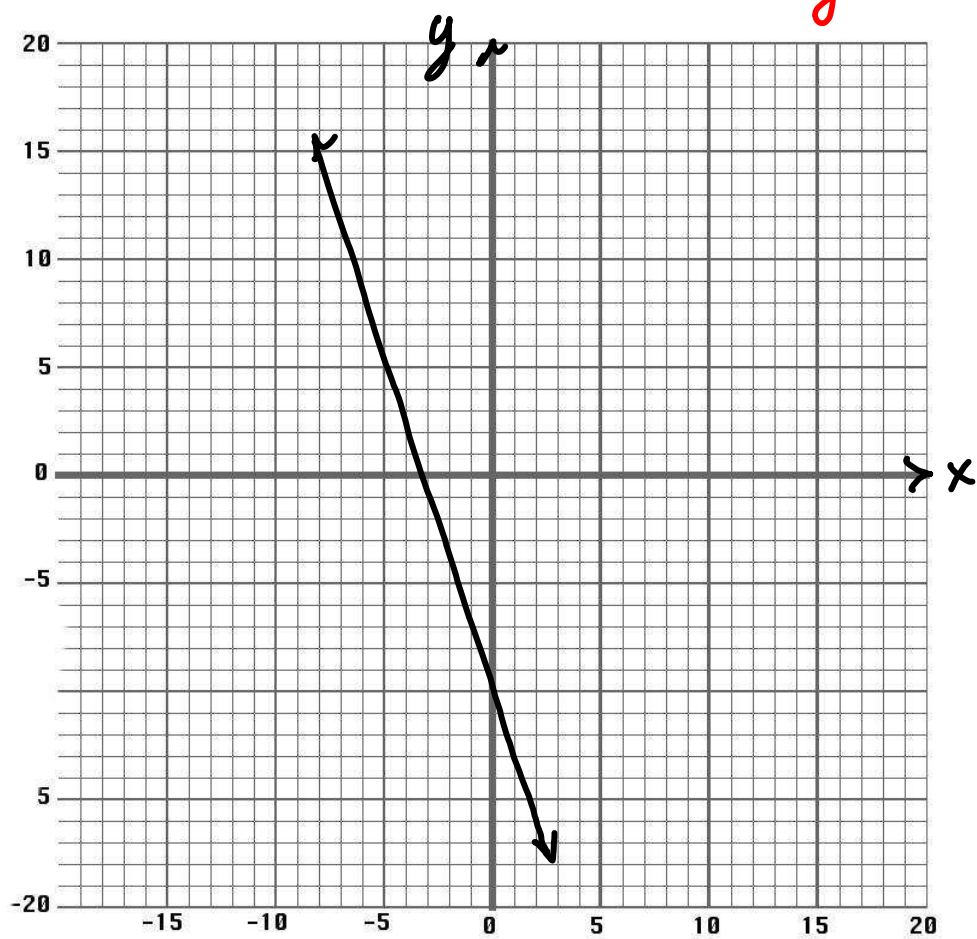


Example Set: B

Use the graph to write the equation of the line



$$y = -3x - 10$$





Example Set: C

Write a Linear Model

In 1995 the population at OC High School was 1,100 students. Each year since 1995 the student population increased by 120 students.

1. Write a linear model for the population of OCHS since 1995

$$P = 120 \text{ years} + 1100$$

2. What was the population of OCHS in 2003?

2060