

# 3-7

## Standardized Test Prep

### Equations of Lines in the Coordinate Plane

#### Multiple Choice

For Exercises 1-4, choose the correct letter.

1. What is the slope of the line passing through the points  $(2, 7)$  and  $(-1, 3)$ ?

(A)  $\frac{2}{7}$

(B)  $\frac{3}{4}$

(C)  $\frac{4}{3}$

(D)  $\frac{1}{3}$

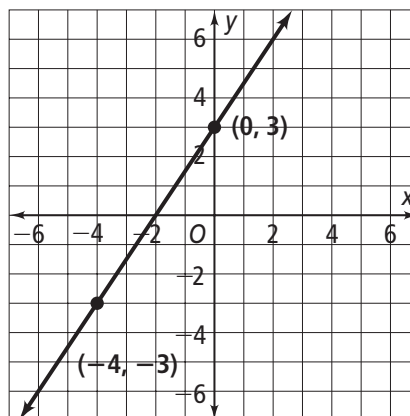
2. What is the correct equation of the line shown at the right?

(F)  $y = \frac{3}{2}x + 3$

(H)  $y = \frac{2}{3}x + 3$

(G)  $y = -\frac{3}{2}x - 3$

(I)  $y = -\frac{2}{3}x - 3$



3. The  $x$ -intercept of a line is  $-5$  and the  $y$ -intercept of the line is  $-2$ . What is the equation of the line?

(A)  $y = -\frac{5}{2}x - 5$

(C)  $y = -\frac{5}{2}x - 2$

(B)  $y = \frac{2}{5}x + 2$

(D)  $y = -\frac{2}{5}x - 2$

4. What is the slope-intercept form of the equation  $y - 7 = -\frac{5}{2}(x + 4)$ ?

(F)  $y - 2 = -\frac{5}{2}(x + 2)$

(H)  $y = -\frac{4}{7}x + 2$

(G)  $y + 7 = -x + \frac{5}{2}$

(I)  $y = -\frac{5}{2}x - 3$

#### Short Response

5. **Error Analysis** A student has attempted to graph an equation that contains the point  $(1, -4)$  and has a slope of  $\frac{1}{3}$ .

a. What is the correct equation in slope-intercept form?

b. What is the student's error on the graph?

