Name _____ Class _____ Date _____

2-4 Standardized Test Prep

More About Linear Equations

Multiple Choice

For Exercises 1–5, choose the correct letter.

1. For the linear equation $x - 2y = 10$, which of the following has value 10?

(A) the slope (B) the x-intercept (C) the y-intercept (D) the origin

2. Which represents the slope of a line that is parallel to a line with a slope of -2?

(F) $-\frac{1}{2}$ (G) $\frac{1}{2}$ (H) -2 (I) 2

3. Which equation represents a line through $(-2, 1)$ that is perpendicular to $y = -5x + 2$?

(A) $y = \frac{1}{5}x + \frac{7}{5}$ (B) $y = -5x - 9$ (C) $y = -\frac{1}{5}x - \frac{7}{5}$ (D) $y = 5x + 9$

4. Which equation represents a line through $(-1, 1)$ with a slope of $\frac{2}{3}$?

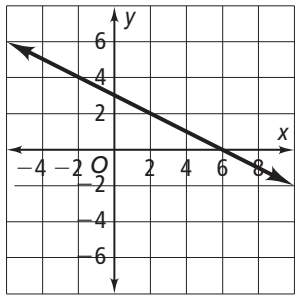
(F) $y - 1 = \frac{2}{3}(x + 1)$ (H) $y - 1 = \frac{2}{3}(x - 1)$

(G) $y + 1 = \frac{2}{3}(x - 1)$ (I) $y + 1 = \frac{2}{3}(x + 1)$

5. Which of the following equations is shown in the graph?

(A) $y + 2 = -\frac{1}{2}(x + 2)$ (C) $y - 3 = -\frac{1}{2}(x - 6)$

(B) $y + 3 = -\frac{1}{2}(x + 6)$ (D) $y - 2 = -\frac{1}{2}(x - 2)$



Short Response

6. The line $y = \frac{5}{9}x + 6$ is graphed on a coordinate plane. A second line is drawn on the same plane with a slope of $-\frac{5}{9}$ and y-intercept $(0, -6)$. Write the equation of the second line. Describe the relationship between these two graphs.