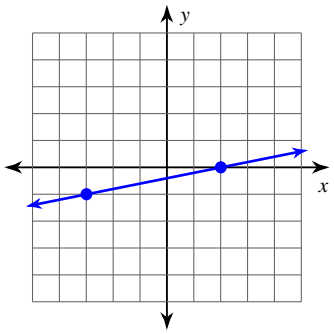
0520 Geometry Name_____

# Practice quiz on graphing and writing equations of lines Date_____ Period____



**Find the slope of each line.**

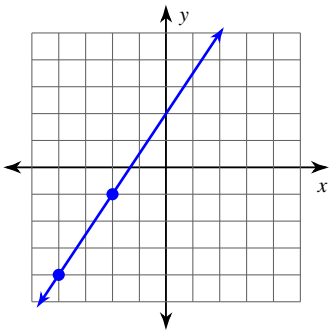
1)




A) 5 B) $-\frac{1}{5}$

C) $\frac{1}{5}$ D) −5

2)




A) $\frac{2}{3}$ B) $-\frac{3}{2}$

C) $\frac{3}{2}$ D) $-\frac{2}{3}$

3) $y = \frac{5}{2}x - 4$

A) $-\frac{5}{2}$ B) $\frac{2}{5}$

C) $-\frac{2}{5}$ D) $\frac{5}{2}$

4) $y = 2x - 5$

A) $\frac{1}{2}$ B) $-\frac{1}{2}$

C) 2 D) −2

**Find the slope of the line through each pair of points.**

5) $(2, 17), (-19, -14)$

A) $-\frac{21}{31}$ B) $\frac{21}{31}$

C) $-\frac{31}{21}$ D) $\frac{31}{21}$

6) $(15, -13), (20, 3)$

A) $\frac{5}{16}$ B) $\frac{16}{5}$

C) $-\frac{16}{5}$ D) $-\frac{5}{16}$

**Find the slope of a line parallel to each given line.**

7) $y = -\frac{1}{2}x - 1$

A) 2 B) $-\frac{1}{2}$

C) −2 D) $\frac{1}{2}$

8) $y = \frac{1}{4}x - 1$

A) $\frac{1}{4}$ B) 4

C) −4 D) $-\frac{1}{4}$

**Find the slope of a line perpendicular to each given line.**

9) $y = -2x$

A) −2 B) 2

C) $\frac{1}{2}$ D) $-\frac{1}{2}$

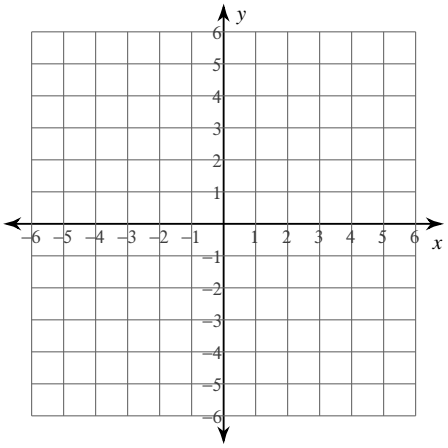
10) $y = \frac{1}{3}x$

A) $\frac{1}{3}$ B) 3

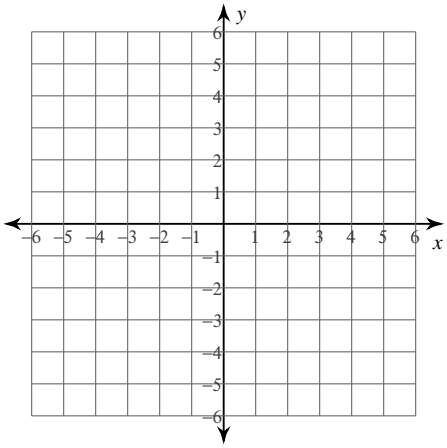
C) −3 D) $-\frac{1}{3}$

**Sketch the graph of each line.**

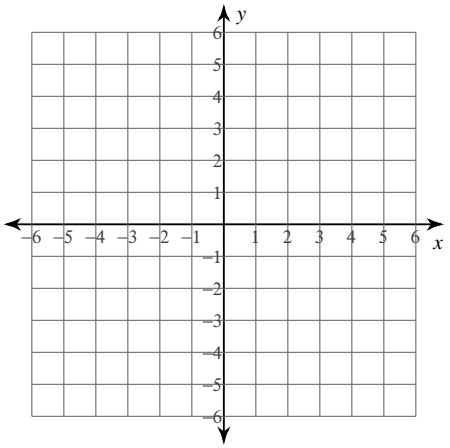
11) $x$-intercept = 4, $y$-intercept = −1



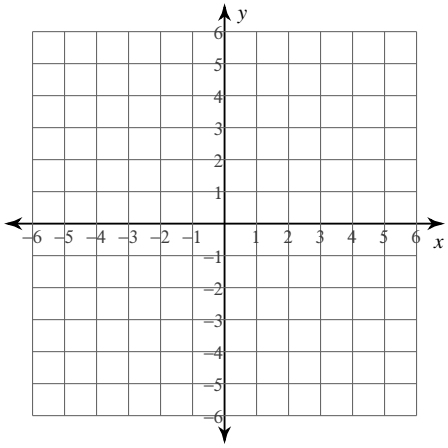

12) $x$-intercept = −4, $y$-intercept = 1



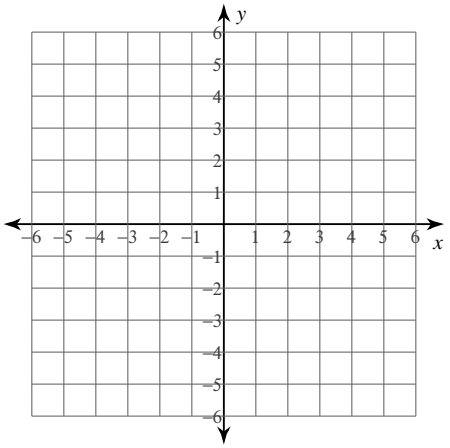
13) $y = \frac{9}{2}x - 5$



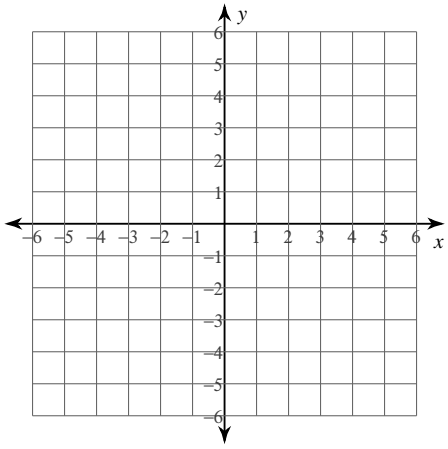
14) $y = -4x - 3$



15) $y = \frac{1}{5}x + 4$

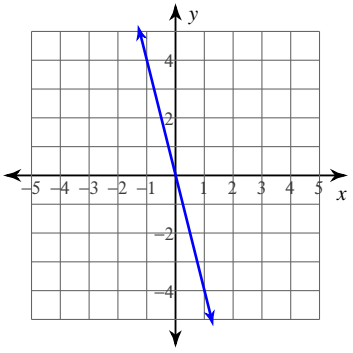


16) $y = -x + 2$



**Write the slope-intercept form of the equation of each line.**

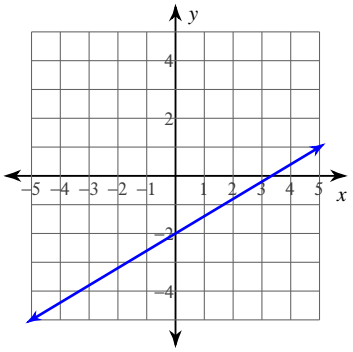
17)



A) $y = 4x$ B) $y = -4x$

C) $y = -2x$ D) $y = 2x$

18)




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

B) $y = -x - 2$

C) $y = x - 2$

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

**Write the slope-intercept form of the equation of each line given the slope and y-intercept.**

19) Slope = $-\frac{3}{2}$, y-intercept = 3

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

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

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

D) $y = -\frac{3}{2}x + 3$

20) Slope = 2, y-intercept = 2

A) $y = 2x + 2$

B) $y = 2x + 3$

C) $y = -2x + 2$

D) $y = 3x + 2$

**Write the slope-intercept form of the equation of each line.**

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

A) $y = -4x + \frac{3}{2}$

B) $y = -\frac{3}{2}x + 4$

C) $y = 4x + \frac{3}{2}$

D) $y = \frac{3}{2}x + 4$

22) $y - 4 = -\frac{7}{3}(x + 2)$

A) $y = \frac{1}{3}x - \frac{2}{3}$

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

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

D) $y = -\frac{7}{3}x - \frac{2}{3}$

**Write the slope-intercept form of the equation of the line through the given points.**

23) through: $(3, -1)$ and $(-2, -2)$

A) $y = \frac{1}{5}x - \frac{8}{5}$

B) $y = -\frac{3}{5}x + \frac{1}{5}$

C) $y = x + \frac{1}{5}$

D) $y = -\frac{8}{5}x + \frac{1}{5}$

**Write the slope-intercept form of the equation of the line described.**

24) through: $(-3, 0)$, parallel to $y = 1$

A) $y = 0$

B) $y = -\frac{1}{3}x - \frac{1}{3}$

C) $y = -\frac{1}{3}$

D) $y = -\frac{1}{3}x$

25) through: $(-3, 3)$, perp. to $y = -\frac{1}{3}x$

A) $y = 12x - 3$

B) $y = -x + 12$

C) $y = -3x + 12$

D) $y = 3x + 12$