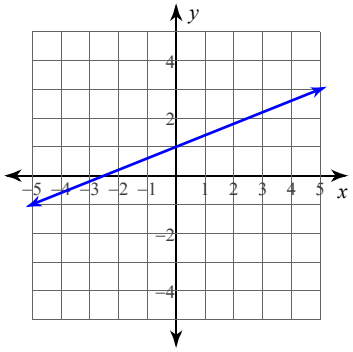
Math 08H

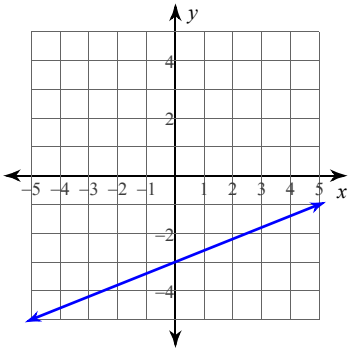
17-10-23

Write the standard form of the equation of each line.

1)



2)



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

3) Slope = 7, y-intercept = 4

4) Slope = $\frac{1}{5}$, y-intercept = –2

5) Slope = $-\frac{3}{2}$, y-intercept = 0

6) Slope = –8, y-intercept = –5

Write the standard form of the equation of the line through the given point with the given slope.

7) through: $(4, -1)$, slope = $-\frac{5}{4}$

8) through: $(-3, 3)$, slope = –1

9) through: $(5, -3)$, slope = $\frac{1}{5}$

10) through: $(5, 0)$, slope = $-\frac{4}{5}$

Write the standard form of the equation of the line through the given points.

11) through: $(-3, 2)$ and $(1, 4)$

12) through: $(-1, 0)$ and $(-3, 1)$

13) through: $(4, 4)$ and $(0, 1)$

14) through: $(4, 3)$ and $(1, -1)$

Write the standard form of the equation of the line described.

15) through: $(5, -4)$, parallel to $y = -\frac{8}{5}x - 2$

16) through: $(-4, 4)$, parallel to $y = -2x$

17) through: $(-3, 3)$, parallel to $y = -x + 1$

18) through: $(-3, -4)$, parallel to $x = 0$

19) through: $(5, 3)$, perp. to $y = 5x - 3$

20) through: $(4, 0)$, perp. to $y = \frac{4}{5}x - 3$

21) through: $(-4, 2)$, perp. to $y = -2x + 4$

22) through: $(4, -1)$, perp. to $y = 2x$

23) through: $(-2, -3)$, perp. to $y = \frac{1}{2}x - 3$

24) through: $(2, 4)$, perp. to $y = -\frac{1}{3}x + 5$

25) through: $(2, -3)$, perp. to $y = \frac{1}{4}x - 5$

26) through: $(-1, -5)$, perp. to $y = -\frac{1}{8}x - 2$

Answers to 17-10-23

1) $2x - 5y = -5$
2) $2x - 5y = 15$
3) $7x - y = -4$
4) $x - 5y = 10$
5) $3x + 2y = 0$
6) $8x + y = -5$
7) $5x + 4y = 16$
8) $x + y = 0$
9) $x - 5y = 20$
10) $4x + 5y = 20$
11) $x - 2y = -7$
12) $x + 2y = -1$
13) $3x - 4y = -4$
14) $4x - 3y = 7$
15) $8x + 5y = 20$
16) $2x + y = -4$
17) $x + y = 0$
18) $x = -3$
19) $x + 5y = 20$
20) $5x + 4y = 20$
21) $x - 2y = -8$
22) $x + 2y = 2$
23) $2x + y = -7$
24) $3x - y = 2$
25) $4x + y = 5$
26) $8x - y = -3$