Algebra 2 (Mat-08)

15-10-28-T8

Write the standard form of the equation of each line.

1) $y = -3$

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

3) $x = -3$

4) $y = -2x - 6$

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

6) $0 = x$

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

8) $y + 4 = 3(x + 1)$

9) $y - 3 = -\frac{1}{2}(x + 4)$

10) $y - 3 = x - 5$

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

11) through: $(-2, -1)$ and $(1, 5)$

12) through: $(0, 4)$ and $(0, -3)$

13) through: $(-5, 2)$ and $(-1, 0)$

14) through: $(-1, 5)$ and $(-2, 3)$

15) through: $(2, 2)$ and $(-1, 2)$

16) through: $(-1, 2)$ and $(5, 4)$

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

17) through: $(4, 4)$, parallel to $y = \frac{9}{4}x - 1$

18) through: $(-4, -3)$, parallel to $y = -\frac{1}{2}x - 2$

19) through: $(-2, 5)$, parallel to $y = -\frac{4}{3}x + 3$

20) through: $(4, -2)$, parallel to $y = \frac{1}{2}x - 3$

21) through: $(-2, 3)$, parallel to $y = -5x + 3$

22) through: $(1, 0)$, parallel to $y = 4x - 1$

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

24) through: $(5, 2)$, perp. to $y = -\frac{10}{3}x + 2$

25) through: $(-3, -5)$, perp. to $y = -\frac{1}{8}x - 1$

26) through: $(0, -5)$, perp. to $y = -\frac{5}{6}x + 2$

27) through: $(-3, -4)$, perp. to $y = -2x + 2$

28) through: $(-3, -2)$, perp. to $y = -x$

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

29) through: $(5, 4)$ and $(0, 5)$

30) through: $(-4, 0)$ and $(5, 3)$

31) through: $(0, 4)$ and $(-3, -1)$

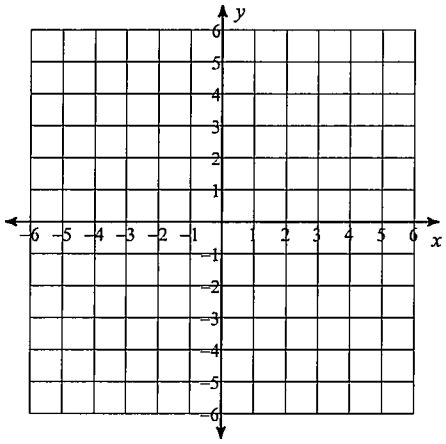
32) through: $(0, -5)$ and $(1, -1)$

33) through: $(0, -4)$ and $(4, 1)$

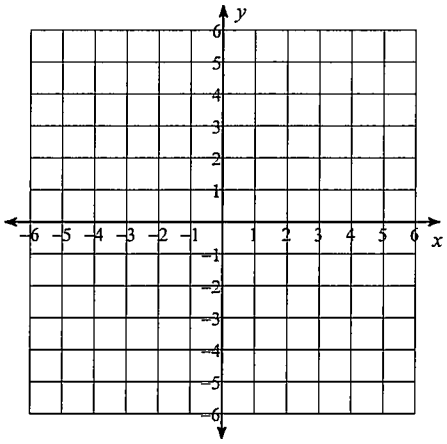
34) through: $(-4, -3)$ and $(0, 4)$

Sketch the graph of each line.

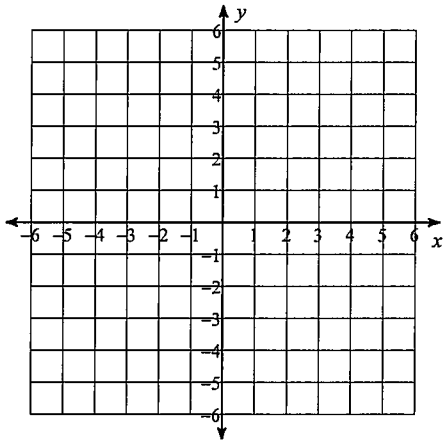
35) $3x - 2y = 10$



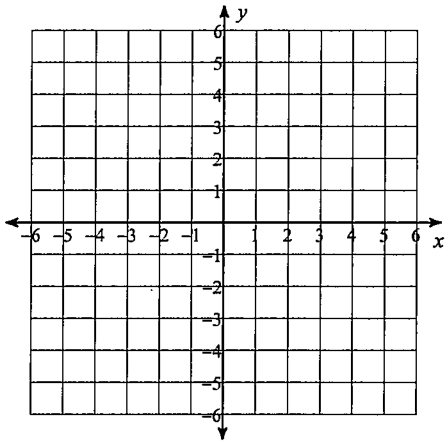
36) $5x + 3y = 3$



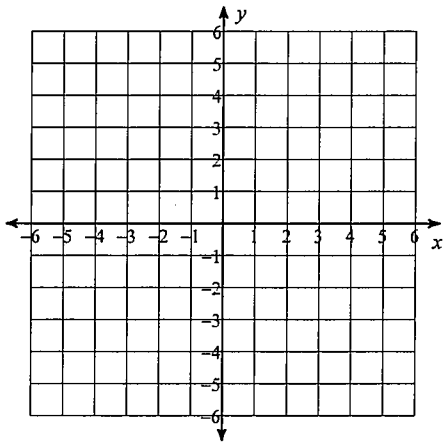
37) $x + 5y = -5$



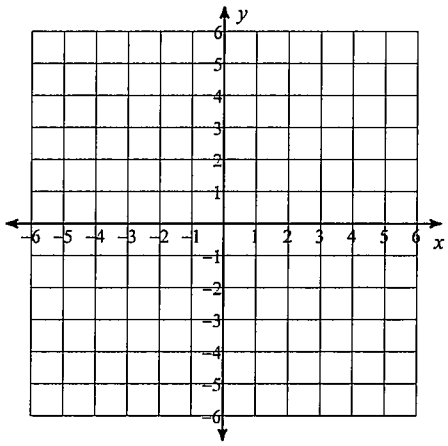
38) $7x - 5y = -25$



39) $6x - y = -3$

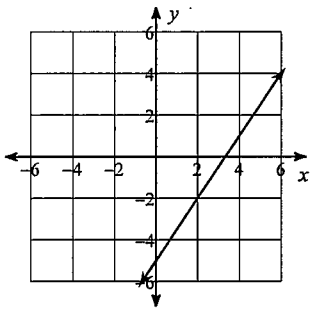


40) $x + y = -2$

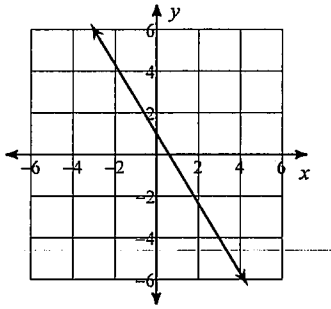


Answers to 15-10-28-T8

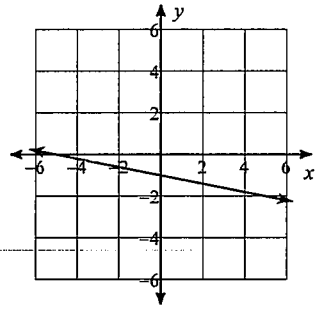
1) $y = -3$
2) $x - 5y = 15$
3) $x = -3$
4) $2x + y = -6$
5) $2x + 3y = -9$
6) $x = 0$
7) $x - 2y = 2$
8) $3x - y = 1$
9) $x + 2y = 2$
10) $x - y = 2$
11) $2x - y = -3$
12) $x = 0$
13) $x + 2y = -1$
14) $2x - y = -7$
15) $y = 2$
16) $x - 3y = -7$
17) $9x - 4y = 20$
18) $x + 2y = -10$
19) $4x + 3y = 7$
20) $x - 2y = 8$
21) $5x + y = -7$
22) $4x - y = 4$
23) $5x + 2y = -5$
24) $3x - 10y = -5$
25) $8x - y = -19$
26) $6x - 5y = 25$
27) $x - 2y = 5$
28) $x - y = -1$
29) $y = -\frac{1}{5}x + 5$
30) $y = \frac{1}{3}x + \frac{4}{3}$
31) $y = \frac{5}{3}x + 4$
32) $y = 4x - 5$
33) $y = \frac{5}{4}x - 4$
34) $y = \frac{7}{4}x + 4$
35)



36)



37)



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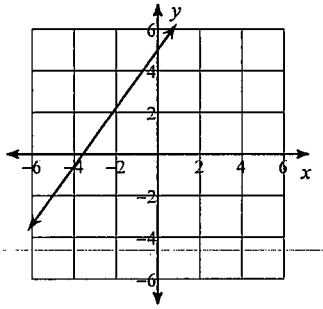
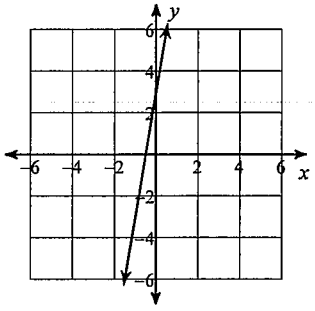


39)



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