

Math 8 Honors

17-10-16

**Write the standard form of the equation of each line.**

1)  $0 = -4x - 3 + 3y$

2)  $x = -y - 2$

3)  $-y = -7x + 5$

4)  $0 = -x - 2y + 4$

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

5) through:  $(2, -3)$ , slope  $= -\frac{5}{2}$

6) through:  $(-2, 1)$ , slope  $= \frac{1}{4}$

7) through:  $(2, -3)$ , slope  $= -\frac{1}{2}$

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

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

9) through:  $(0, 5)$  and  $(5, 1)$

10) through:  $(1, 0)$  and  $(4, 3)$

11) through:  $(0, 5)$  and  $(-5, 4)$

12) through:  $(0, -3)$  and  $(-5, 3)$

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

13) through:  $(4, 0)$ , parallel to  $y = -2x - 4$

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

15) through:  $(5, 4)$ , parallel to  $y = \frac{9}{5}x - 4$

16) through:  $(2, 5)$ , parallel to  $y = x - 2$

17) through:  $(-4, 5)$ , perp. to  $y = \frac{4}{9}x + 2$

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

19) through:  $(1, 2)$ , perp. to  $y = -\frac{1}{7}x + 2$

20) through:  $(3, 0)$ , perp. to  $y = \frac{3}{4}x - 2$

## Answers to 17-10-16

1)  $4x - 3y = -3$

5)  $5x + 2y = 4$

9)  $4x + 5y = 25$

13)  $2x + y = 8$

17)  $9x + 4y = -16$

2)  $x + y = -2$

6)  $x - 4y = -6$

10)  $x - y = 1$

14)  $2x + y = 4$

18)  $5x - 4y = -12$

3)  $7x - y = 5$

7)  $x + 2y = -4$

11)  $x - 5y = -25$

15)  $9x - 5y = 25$

19)  $7x - y = 5$

4)  $x + 2y = 4$

8)  $9x - 5y = -20$

12)  $6x + 5y = -15$

16)  $x - y = -3$

20)  $4x + 3y = 12$