Worksheet 5.6 - The Standard Form of a Linear Equation (textbook pages 308-314)

LEVEL 1

Write the equation in standard form with integer coefficients. Show your work.

2) y = 5 - 3x1) 2x - y - 8 = 03) x - 4 = 0

4)
$$\frac{1}{4}x - 2y = -3$$
 5) $0.6x = 2.1y + 1.8$ 6) $3y = 12$

LEVEL 2

Write the standard form of the equation of the line that passes through the given point and has the given slope. Show your work.

7) (4, 3);
$$m = 2$$

8) (-2,4); $m = -6$
9) (6, -8); $m = \frac{1}{3}$

Write the standard form of the equation of the line that passes through the given points. Show your work.

10) (5, 8) and (3, 2) 11) (-4, -5) and (-2, 5) 12) (-2, 5) and (3, -10)

LEVEL 3

Write the standard form of the equation of the horizontal and vertical lines that pass through the given point.

13) (3, -4) 14) (5, 1) 15) (0, -4)

LEVEL 4

- 16) You are in charge of buying the hamburger and boned chicken for a party. You have \$60 to spend. The hamburger costs \$2 per pound and boned chicken is \$3 per pound.
 - a) Write an equation that represents the different amounts of hamburger, *x*, and chicken, *y*, that you can buy.
 - b) Rewrite your equation from part a in slope-intercept form.
 - c) Sketch the graph of the linear equation from b above.

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d) Complete the table and label the points from the table on the graph.

Hamburger (lb), x	0	6	12	18	30
Chicken (lb), y					