Lesson 3.2 - 3.3 Homework

Algebra 2

Graph these lines on graph paper. Use your knowledge of the equations of lines. Do not make a table of points.

1.
$$y = 2/3x + 1$$

2.
$$y = -1/4x + 6$$

3.
$$y = x - 3$$

4.
$$y = -2x + 5$$

5.
$$y = 4$$

6.
$$y = -3$$

7.
$$x = 4$$

8.
$$x = -2$$

Calculate the x and y-intercepts of each line. X-intercept (___, 0) Y-intercept (0,___)

9.
$$y = 3x - 12$$

10.
$$2x - 4y = 12$$

11.
$$x + 3y = 5$$

Write the equation of each line in point-slope form: $y - y_1 = m(x - x_1)$

12. Point
$$(8, 3)$$
; slope = $4/5$

13. Point
$$(-11, 15)$$
; slope = -4

Transform the point-slope equation to slope-intercept form (this is answer a). Then transform your answer from part a into standard form (this is answer b).

15.
$$y - 3 = -2(x + 5)$$

16.
$$y + 4 = 3/2(x - 6)$$

17.
$$y - 1 = -1/4(x + 5)$$

Standard form: Ax + By = C (A, B, and C have to be integers)