Practice of skills learned so far

Part 1:

Find the slope for the following problems: $m = \frac{y_2 - y_1}{x_2 - x_1}$

1. $(1,5)$ *and* $(11,20)$	2. $(-2,3)$ *and* $(1,-3)$	3. $(5,2)$ *and* $(1,2)$	4. $(4,3)$ *and* $(4,1)$

5. Write the equation of the line that passes through the points (2, 7) with slope of 5.
6. Write the equation of the line that passes through the points (-3, 1) with slope of $\frac{2}{3}$.
7. Write the equation of the line that passes through the points (-4, 6) and (1, 16).

Part 2:

Convert the following from **slope intercept** to **standard form:**

1) $y = -\frac{3}{4}x + 2$ 2) $y = -\frac{15}{8}x + 7$ 3) $y = -\frac{10}{3}x + \frac{2}{3}$ 4) $y = -11x - 5$

5) $y = -\frac{16}{9}x + \frac{40}{9}$ 6) $y = -\frac{13}{5}x - 8$ 7) $y = 3x - 3$ 8) $y = 2$

Convert the following from **standard form** to **slope intercept:**

9) $9x + 5y = 35$ 10) $10x - 7y = -35$

11) $x - 6y = -12$ 12) $5x + y = 7$

13) $x = 4$ 14) $4x + 7y = -7$

Take each equation in red and convert it to **slope intercept** and **standard form**:

15. $y - 4 = -5(x + 1)$	16. $y = \frac{3}{4}(x + 4)$
17. $y + 3 = \frac{7}{3}(x + 3)$	18. $y - 2 = -\frac{3}{4}(x - 4)$