1. Write an equation for a line with slope $\frac{7}{11}$ and $y$-intercept $= -7$. 

$$y = \frac{7}{11}x - 7$$

2. Write an equation for a line with slope $\frac{7}{5}$ and $x$-intercept $= -10$. 

$$y - 0 = \frac{7}{5}(x - (-10)) \rightarrow y = \frac{7}{5}x + 14$$

3. Write an equation for the line that passes through the point $A(6, 3)$ and has a slope of $\frac{3}{7}$.

$$y - 3 = \frac{3}{7}(x - 6)$$

4. Write an equation for the line that passes through the point $A(-7, 3)$ and the origin $(0, 0)$.

Enter your equation in

$$\text{slope} = \frac{0 - 3}{0 - (-7)} = -\frac{3}{7} \rightarrow y - 0 = -\frac{3}{7}(x - 0)$$

$$y = -\frac{3}{7}x$$

a) slope-intercept form;

$$y = -\frac{3}{7}x$$

b) standard form.

$$\frac{3}{7}x + y = 0 \rightarrow 3x + 7y = 0$$

5. Write an equation for the line that passes through the points $A(2k, 8)$ and $B(3k, 19)$, and has a slope of $\frac{11}{3}$.

$$\frac{19 - 8}{3k - 2k} = \frac{11}{3}$$

$$\frac{11}{k} = \frac{11}{3}$$

$$33 = 11k$$

$$3 = k$$

$$y - 8 = \frac{11}{3}(x - 6)$$