Way Cool Algebra

Use the given information to draw a line. Then determine the equation of the line from the graph. Afterwards, use your Algebra formulas to determine the equation of the line.

1. $m = \frac{2}{3}$ and $(-6, 1)$

2. $(-2, 10)$ and $(2, -2)$

3. $(-9, 5)$ and $(-3, -3)$

4. Parallel to $y = 2x - 8$ through $(-6, -7)$

5. Perpendicular to $y = 2x - 8$ through $(-6, 4)$

6. Parallel to $-10x - 5y = -15$ through $(-4, 0)$

7. Perpendicular to $20y - 5x = 120$ through $(-3, 4)$

Now let's reverse the methods, since the given information will not fit within your graph. Use your Algebra formulas and then graph your answer.

8. $m = -\frac{5}{3}$ and $(60, -105)$

9. $(-20, -80)$ and $(-5, -20)$

10. Perpendicular to $12y + 108 = 18x$ through $(-48, 40)$