**You must SHOW ALL WORK to receive full credit.**

**What slope would a line parallel to the given line have? What slope would a perpendicular line have?**

1. $ y=\frac{-7}{11}x+5$

 Parallel slope\_\_\_\_\_\_\_\_\_ Perpendicular slope \_\_\_\_\_\_\_\_\_

**Write the equation of the line *parallel or perpendicular* to the given line through the given point.**

2**. Perpendicular** to $y=-4x+7$ through (16,-8)

**Solve the proportion.**

3. $\frac{3x+2}{3}=\frac{2x-3}{-6}$

**Simplify the following exponent problems.**

4.

a. $\frac{x^{2}}{x^{7}}=$ b. $\left(x^{-3}\right)^{-8}=$ c. $x^{-10}∙x=$

5. $\frac{x^{4}∙x^{-8}}{x∙(x^{3})^{-2}}$