**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. $y=\frac{31}{16}x-6$

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

**Using slope –intercept form (y=mx+b), write the equation of the line passing through the given points.**

2. $\left(4, -2\right) and (3, 1)$

**Use Pythagorean Theorem to solve for the missing side. Round your answers to the nearest tenth if necessary:**

3.

x

16 cm

20 cm

**Simplify the following exponent problems.**

4. $\frac{x^{7}}{x^{-7}}=$ 5. $\frac{x∙x^{3}}{x^{2}}=$ 6. $x^{-2}∙x^{-8}$=