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

**Write the equation of the line that:**

1. $passes through the points \left(6, -4\right)and (6, 8).$

**Write the following equation in slope-intercept form, identify the slope and y-intercept, and graph.**

1. $x-3y=-9$

m = \_\_\_\_\_\_\_

b = \_\_\_\_\_\_\_

**Solve:**

3. $\frac{-3}{x-1}=\frac{-2}{x-6}$

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

4. 5.

10 cm

x

14 in

x

25 in.

18 cm