

**MATD 0370 – Elementary Algebra – Summer**      Name \_\_\_\_\_  
**Written Homework #2 – Show all work to receive credit**

**In order to receive full credit for problems 1 – 4, you need to:**

- a) Define your variables
- b) Set up your equation(s)
- c) Solve and show your work
- d) Identify your final answer using appropriate labels and/or units

**Applications with Percent (Section 2.4)**

- 1) Addie has completed 30 hours, which is 24% of the hours she needs to graduate with a bachelor's degree. How many total hours does she need to graduate?

**Word Problems (Section 2.5)**

- 2) The second angle of a triangular kite is four times as large as the first. The third angle is  $5^\circ$  more than the sum of the other two angles. Find the measure of the second angle.

3) Laura paid \$219.45, including 5% tax, for a printer. How much did the printer itself cost?

4) Fine Line Trucks rents an 18-ft truck for \$42 plus 35¢ per mile. Judy needs a truck for one day to deliver a shipment of plants. How far can she drive and stay within a budget of \$70?

**Solving a Formula for a Variable (Section 2.3)**

5) Solve for  $q$ :  $p = \frac{r - q}{2}$

### Solving Inequalities (Section 2.6)

- 6) Solve the inequality and write your answer using **set-builder notation**. Graph your answer on a number line.

$$-\frac{5}{8} < -10y$$