Name:

Date:

Lesson 3.1.1 Homework

**3-4.**For each  x → y table given, copy the table, find the pattern and fill in the missing entries.  Then write the rule for the pattern in words.







**3-5.** At the fair, Kate found a strange machine with a sign on it labeled, “Enter a number.”  When she pushed the number 15, the machine displayed 9.  When she entered 23, the machine displayed 17.  Perplexed, she tried 100, and the machine displayed 94.

* 1. What is the machine doing?
	2. What would the machine display if she entered 77?

**3-6.** Ms. Nguyen needs to separate $385 into three parts to pay some debts.  The second part must be five times as large as the first part.  The third part must be $35 more than the first part.  How much money must be in each part?  Write and solve an equation.

**3-7.** On your paper, write the equation represented on the Equation Mat below.  Simplify as much as possible and then solve for  x.

**3-8.** GO GOLDEN GOPHERS!

The graph below describes the distance two cars have traveled after leaving a football game at the University of Minnesota.



* 1. Which car was traveling faster?  How can you tell?
	2. The lines cross at (2, 80).  What does this point represent?
	3. Assuming that Car A continued to travel at a constant rate, how far did Car A travel in the first 4 hours?