Name:

Date:

Lesson 7.3.2 Homework

* **7-102.** At a family reunion, each family member recorded his or her age and height.
	1. Fully describe the association.
	2. Draw the trend line.  Does your y‑intercept make sense in this problem situation?

**7-103.** Marissa’s older sister was discussing purchasing a car with her summer job earnings.  Marissa collected data from her friends at her job.

* 1. Marissa would like to know the typical age of her friends’ cars.  What kind of graphical display should she use?
	2. Marissa wants to convince her dad that newer cars are more fuel-efficient.  What kind of graph(s) should Marissa make to convince her dad?



* 1. Make a scatterplot of the data.
	2. Fully describe the association.
	3. Draw a line of best fit on the data.  Find the equation of the line of best fit.
	4. Use the equation to predict what the correct mileage for a 7-year-old car should be.
	5. Interpret the slope and y‑intercept in this situation.

**7-104.** When Malcolm hops 10 times down the hallway, he travels 12 feet.  How many times would he need to hop to travel to his class, 90 feet away?



**7-105.** Jeffrey and Liz are each saving money for college.  Their savings are shown in the graph at right.

* 1. Based on the graph, who is saving money fastest?  Justify your answer.
	2. What is the slope of each line?  What does the slope tell you about this situation?

**7-106.**Simplify and solve the following equations.

* 1. 
	2. 3x + 4.5 = 4.5x – 18
	3. 
	4. 6.25x + 7.5 − 2.5x = 3.75x − 8.75