Name_____Date_____Hour_____

Worksheet 3.5 and 3.6 – Story Problems and Decimal Linear Equations – Textbook pages 160-173

LEVEL 1

Perform any indicated operation. Round the result to the nearest tenth and then to the nearest hundredth.

1) -3.06(5.98)

2) -24.0321 – 21.8219

3) 61.0847 + 62.5583

4) 15.951 ÷ 3.476

Solve the equation. Show your work. Round the result to the nearest hundredth. Check the rounded solution.

5) $7x - 9 = 16$

6) $2(x - 3) = 5x + 7$

LEVEL 2

Solve the equation. Show your work. Round the result to the nearest hundredth.

7) $35.13x - 7.26 = 11.48 - 14.91x$

8) $2.1(8.7 - 6.3x) = -9.5x - 12.4$

Multiply the equation by a power of 10 to write an equivalent equation with integer coefficients. Solve the equation. Round the result to the nearest hundredth.

9) $-1.8 + 4.1x = 5.7$

10) $26.42x - 3.25 = 5.9x - 32.16$

LEVEL 3

11) You are shopping for a new bike. The sales tax is 6%. You have a total of $159 to spend. What is your price limit for the bike? Write an equation and solve. Show your work.

Price limit	+	Sales tax rate	·	Price limit	=	Total cost

12) You have $32.14 to spend for a sweatshirt. The sales tax is 5%. What is the most the sweatshirt can cost? Write an equation and solve. Show your work.

LEVEL 4

13) Currently, you have \$60 and your sister has \$135. You decide to save \$5 of your allowance each week, while your sister decides to spend her whole allowance plus \$10 each week. How long will it be before you have as much money as your sister?

a) Write a verbal model for this problem.

b) Write an equation for the model.

c) Solve the equation and answer the question. Show your work.

d) Complete the table below using the information from the original problem statement.

Week	*0*	*1*	*2*	*3*	*4*	*5*
Your money						
Sister's money						

e) Use the graph to check the answer. Is the solution correct? Explain.