Chapter 3, Quiz #2 Practice
Lessons 3.5, 3.6, & 3.8

Name: _____

Date: _____ Hour: _____

3.5 *I use equations, diagrams, tables, and graphs to understand real-life problems.*
3.6 *I can find exact and approximate solutions of equations that contain decimals.*

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

1) $7x - 8 = 17$ 　　　　　　　　　　　　　　　　　　　　　1)_____

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

2) $-8.2x - 15.4 = 3.1(9.7 - 6.3x)$ 　　　　　　　　　　　2)_____

3) You have \$27.35 to spend on video games. The sales tax is 4%. 　　3)_____
　　Write and solve an equation to determine the most the video games can cost.

4) Suppose you are growing two different varieties of tomato plants. The beefsteak tomato plant is 22½ inches
　　tall and is growing at a rate of 1½ inches per week. The cherry tomato plant is 20 inches tall and is growing
　　at the rate of 2 inches per week. In how many weeks will the two plants be the same height?

　　　a) Write an equation that represents this situation.

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

_3.8_ *I can use rates, ratios and percents to model and solve real-life problems.*

1) Find the unit rate. Show your work.

   1)_____

   $2.59 for 10 apples

2) Find the average speed. Show your work.

   2)_____

   Hike 49 miles in 3 days

3) On a recent test, 25 out of 80 students earned an A.   3)_____
   What percent of the students earned an A? Show your work.

4) The electric company provided the number of kilowatt hours, KWH, used over a 4-month time period in the table below.

Month	1	2	3	4
Number of KWH	640	610	580	480
Number of days	30	29	31	30

   a) Find the average number of kilowatt hours used per day for the 4-month time period. Show your work.

   b) Use your answer in part (a) to estimate the number of kilowatt hours used in 10 days. Show your work.