Consumer Math
Unit 5

Unit 5 Review

Name: _____ Date: _____

1. Max compiled a list of these car prices: $7500, $6500, $5750, $4900, $6250, $4200. Find the *mean* of the prices.

2. Jamie recorded the following car prices: $10,200, $9300, $11,900, $2999, $17,200, and $9600. Find the *median* of the prices.

3. Below are the tire pressures at an auto clinic. Find the quartiles and sketch a box-and-whisker plot of the data.

15, 17, 21, 25, 31, 32, 32, 32, 34

Q_1: _____ Q_2: _____ Q_3: _____

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4. What percent of the numbers in any data set are:

a) above Q_3? _____

b) between Q_1 and Q_3? _____

c) between the min and Q_3? _____

d) between Q_1 and Q_2? _____

5. In the data set below, find the measures of center and measures of spread.

Academy Awards

Movie	# Awards
Grand Hotel	1
You Can't Take It with You	2
Cimarron	3
Crash	3
The Life of Emile Zola	3
Ordinary People	4

Movie	# Awards
Rain Man	4
A Man for All Seasons	6
Patton	7
My Fair Lady	8
Lord of the Rings: Return of the King	11

Mean: _____ Median: _____

Mode: _____ Range: _____

IQR: _____

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6. In the data set below, find the measures of center and measures of spread.

Times Winning the Basketball Tournament

Times Won	Frequency
1	6
2	2
3	1
11	1

Mean: _____ Median: _____

Mode: _____ Range: _____

IQR: _____

7. In the data set below, find the measures of center and measures of spread.

Single Family Home Prices

Stem	Leaf
46	3 6 9
47	5 6 8 8
48	2 6
49	2

Key: 47|5 = 475,000

Mean: _____ Median: _____

Mode: _____ Range: _____

IQR: _____

8. Jenny's annual premium for her car insurance is $1894. If she pays quarterly, there is a $5 per payment surcharge. What would be her quarterly payment?

9. Mary has $1000 deductible collision insurance. She backs her car into a mailbox and causes $3400 worth of damage to her car. How much will:

Mary have to pay: _____ Insurance have to pay: _____

10. Ron has $1200 deductible collision insurance. His car slips in the snow and crashes into a tree, causing $4100 worth of damage to his car. How much will:

Ron have to pay: _____ Insurance have to pay: _____

11. Keith ran his car into a telephone pole that had s bicycle leaning against it which was also damaged. The pole will cost $3800 to fix, the bicycle will cost $1300 to replace, and there was $4100 damage to his car. If he has $10,000 liability insurance, how much of the damage will Keith have to pay himself?

12. Joan has 50/100 BI liability insurance. She gets into an accident with a bus, causing injury to 28 people, and each person is awarded $10,000 as a result of a lawsuit. How much will:

    The insurance company pay each person: _____

    The insurance company pay total: _____

    Joan pay (total): _____

13. You buy a car for $32,000. Two years later, it is worth $24,000.

    a) What is its rate of depreciation?

    b) What is the depreciation equation?

    c) Use your depreciation equation to determine the car's worth in 5 years.

14. You buy a car for $19,000. Three years later, it is worth $12,000.

    a) What is its rate of depreciation?

    b) What is the depreciation equation?

    c) Use your depreciation equation to determine the car's worth in 5 years.

15. The straight line depreciation equation for a car is $y = -3400x + 85{,}000$.

a) What is the original price of the car?

b) How much value does the car lose per year?

c) How much is the car worth after 3 years?

16. The straight line depreciation equation for a car is $y = -2680x + 26{,}800$.

a) What is the original price of the car?

b) How much value does the car lose per year?

c) How much is the car worth after 4 years?

17. The exponential depreciation equation for a car is $y = 26{,}600 \times 0.945^{x}$. What is the car worth after 3 months?

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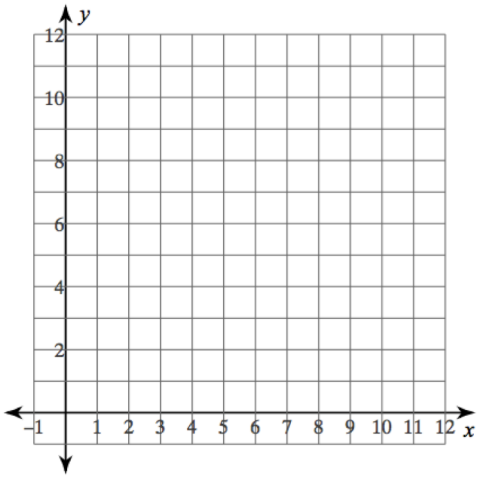
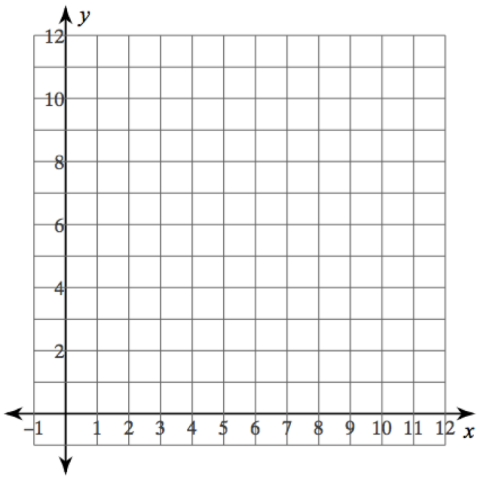
18. What does the graph of a straight line depreciation graph look like vs an exponential depreciation graph?





19. A car is traveling at 74 mph when a deer jumps in front.

a) What is the approximate reaction distance?

b) What is the approximate braking distance?

c) What is the approximate stopping distance?

20. Toni's car is traveling at 75 km/h when she notices a family of ducks crossing the road ahead of her. Will she be able to stop before she reaches the ducks?