

Final Exam Review – Unit 5

Name: _____

Date: _____

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

2. 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

Q₁: _____

Q₂: _____

Q₃: _____



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

a) above Q₃? _____

b) between Q₁ and Q₃? _____

c) between the min and Q₃? _____

d) between Q₁ and Q₂? _____

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

Academy Awards

Movie	# Awards	Movie	# Awards
Grand Hotel	1	Rain Man	4
You Can't Take It with You	2	A Man for All Seasons	6
Cimarron	3	Patton	7
Crash	3	My Fair Lady	8
The Life of Emile Zola	3	Lord of the Rings: Return of the King	11
Ordinary People	4		

Mean: _____

Median: _____

Mode: _____

Range: _____

IQR: _____

5. 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: _____

6. 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: _____

7. 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?

8. 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: _____

9. Keith ran his car into a telephone pole that had a 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?

10. 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): _____

11. 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.

12. 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?

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

14. 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?