

## Quiz II Algebraic Connections

### DO NOT WRITE ON THIS QUIZ!

Use your own paper, or the computer, to report the answers to the questions. Make sure you use the problem numbers, show all work, document your solutions, and include the answer to the question! Name, Date, Period, and What it is.

1. Find the following information for:

$$y = 3 * |-5(11 - x)| - 9$$

Where  $x$  is the number of liters of Pepsi sold in thousands, and  $y$  is the number of tumors found in the population in hundreds.

- a) Identify the transition point (Maximum or Minimum) showing the shift from increasing (or decreasing) tumors.
  - b) What is the rate of hundreds of tumors per thousands of liters of Pepsi (Slope of Left and Right sides), before and after the transition point?
  - c) Name the number of tumors in hundreds when no Pepsi is sold (Y-Intercept).
  - d) Identify the amount of Pepsi in thousand liters, when there are no tumors (X-Intercept(s)).
2. Using the AlgConn Syllabus, calculate Urt's grade for the Semester if they score 77% on the final examination.

Item	1 <sup>st</sup> 9 weeks	2 <sup>nd</sup> 9 weeks
OverArching Process	2	3
7 Parts of AlgConn	3	4
Ability to Test	2	3
Working W/Tech	3	4
Growth	4	3
Free/Web	3	2
Journal	4	3

3. Using the data in the following list (**QUIZZ** or **L<sub>6</sub>**), which is number of hours worked by employees of Wal-Mart South in the last 10 days, identify the following values:

73	71	17	43	35	59	10
31	77	21	63	74	22	33
7	73	14	7	45	67	76
26	26	15	10	58	7	36

$n$	mean	median	mode	average	maximum	minimum	range
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4. Make a Histogram of this data and use it to predict your stock needs, if they get 0.7 shares of Wal-Mart stock for every 10 hours worked, in a 10-day period.