Systems of Equations – Day 1 Name_____
Notes Date_____Per._____

1. Mel Ting sells $\frac{1}{2}$ - gallon containers of frozen yogurt for $4 each and 1 – gallon containers for $7 each.

   a) ***Define*** variables for the number of $\frac{1}{2}$ – gallon containers and for the number of 1 – gallon containers sold.

   Variable: _____

   Variable: _____

   b) One day Mel sells a total of 50 containers of yogurt, for a total of $287. Write a system of equations expressing these facts.

   Equation: _____

   Equation: _____

2. A scuba diving resort hotel offers divers two plans. Plan *A* gives 3 nights' lodging and 4 dives. Plan *B* gives 5 nights' lodging and 8 dives.

   a) ***Define*** variables for the number of dollars they charge per night and for the number of dollars charged per dive.

   Variable: _____

   Variable: _____

   b) A price list comes out in which Plan *A* costs $440 and Plan *B* costs $780. Write a system of equations expressing these facts.

   Equation: _____

   Equation: _____

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3. During one week of playing basketball, Manu Ginobili hit 30 shots from the floor and scored 68 points. Each shot was a 2-point shot or a 3-point shot. Write a system of equations which could be used to find the number of each type of "shot" Manu made.

   Variable: _____ Equation: _____

   Variable: _____ Equation: _____

4. A rectangle is 7 inches longer than it is wide. If the perimeter is 72 inches, how long is the rectangle? Write a system which could be used to find the length of the rectangle.

   Variable: _____ Equation: _____

   Variable: _____ Equation: _____

5. Mark has $4.95 in quarters and dimes. He has 3 times as many dimes as quarters. Write a system of equations that could be used to find *q*, the number of quarters, and *d*, the number of dimes, Mark has.

   Variable:_____ Equation: _____

   Variable:_____ Equation: _____