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| How to think about two related measurements | 1. Write a hypothesis of the form  “I believe the amount of \* depends on the amount of \*\*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | **3. Graph**  ***Add a best fit line to this data.***  http://people.physics.tamu.edu/kamon/teaching/phys202/grade/2008A/2008A_phys202_Exam1_vs_HW.jpg | | |
|  |  |  | |  |
| **4. Slope The slope can NOT be based on data points.**  **It must be based on the best-fit line you drew with the ruler.**  **Use the formula for any two points on the line.**  ***Please show units.*** | | |  | **5. Sentence**  ***Based on the slope you calculated in Step 4, write a sentence similar to “For every 2 bags there are 34 potatoes”. Your X variable always goes first in such a sentence.*** |
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Your Period\_\_\_\_\_Name \_\_\_\_\_\_\_\_\_\_\_\_

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| Either use your 6 rules from the textbook OR use today’s Atlantic-Pacific rules. Both work. For each number below, determine how many significant figures it has.  1) 3.0800 sec \_\_\_\_\_\_  2) 0.00418 m \_\_\_\_\_\_  3) thirty dirty birds \_\_\_\_\_\_  4) 91,600 people \_\_\_\_\_\_  5) 0.003005 meters \_\_\_\_\_\_  6) 1 pound of bird feces \_\_\_\_\_\_  7) 250 kg \_\_\_\_\_\_  8) 780,000,000 m \_\_\_\_\_\_  9) 0.0101 sec \_\_\_\_\_\_  10) 0.00800 g \_\_\_\_\_\_  11) 0.0078 cm \_\_\_\_\_\_  12)1.090 grams \_\_\_\_\_\_  13) 78900 grams \_\_\_\_\_\_  14) 25 cents in a quarter \_\_\_\_  15) 2200000 meters \_\_\_\_\_\_ | **Multiplying/Dividing with Measurements**  The product or division will never have any more precision then the measurement with the least number of significant figures.  For each problem determine the significant figures (SF) of each number and then circle the lowest number of SF. Round the answer to that many SF.  Model:  32.90 grams / 25.2 ml = 1.3055556 = 1.31 grams / ml  4  3  1. 12.8 x 5.2 =      2. 100 x 8.57 =      3. 6008 / 8.724 =      4. 72 / 7 =      5. 600 / 38 =      6. 0.00005 x 538 = |