Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_Period: \_\_\_\_\_\_Date: \_\_\_\_\_\_

**5.3B Writing Proportions\_Classwork**

5.3

*Objective: write proportions; solve proportions using mental math.*

*CC.SS.7.RP.2c 7.RP.3 MP2 Reasoning Abstractly and Quantitatively*

|  |
| --- |
| **WARM-UP**   1. Round to the nearest tenth.   1.35654 = 3.334 =   1. Round to the nearest hundredth.   2.9354 = 3.6999 =   1. Round to the nearest cent.   $1.342333 = $4.59999 = |
| **Example 1:** Solve for x. Round to the nearest tenth.    **Example 2:** test score worth 60 points, test score is 80%. Write a proportion to find how many points a student needs to score one the test to get the given score.  **Example 3:** Solve for g using the table.   |  |  |  | | --- | --- | --- | |  | Trip 1 | Trip 2 | | Miles | 10 | 12 | | Gallons | 3 | *g* | |

Write a proportion to find how many points a student needs to score on the test to get the given score.

1. test worth 50 points; test score of 84% 2. test worth 75 points; test score of 96%

Use the table to write a proportion.

3. 4.

|  |  |  |
| --- | --- | --- |
|  | Tree 1 | Tree 2 |
| Inches | 15 | *x* |
| Years | 4 | 3 |

|  |  |  |
| --- | --- | --- |
|  | Trip 1 | Trip 2 |
| Miles | 104 | 78 |
| Gallons | 4 | *g* |

Solve the proportion.

5.  6.  7.  8. 

9. A local Humane Society houses 300 animals. The ratio of cats to all animals is 7 : 15.

a. Write a proportion that gives the number of cats *c*.

b. How many cats are in the Humane Society?