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| What are RATIOS good for?  EHS Cλ3MIs+rγ  Mr. Genest |  | Name \_\_\_\_\_\_\_\_\_  Date \_\_\_\_\_\_\_\_\_\_  Tutors! Adults! Help this young chemist by visiting **http:genest.weebly.com** with any smart phone |

Multiplication with units. Use a calculator. Your answer should have units written as one or more words. Round to correct sig figs

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1. Numbers that are in a relationship (use your common sense)

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| * 1. \_\_\_\_\_ EGGS = \_\_\_\_\_ DOZENS   2. \_\_\_\_\_EYES = \_\_\_\_\_HUMAN   3. \_\_\_\_\_LEGS = ­\_\_\_\_\_ SPIDER | * 1. \_\_\_\_\_mL = \_\_\_\_\_ liters   2. \_\_\_\_\_ kilometers = \_\_\_\_\_ millimeters   3. \_\_\_\_\_yards = \_\_\_\_\_ football field |

1. Rewrite the six numbers-in-relationships from above as ratios there are two versions of each, one an upside down version of the other.
   1. ratios for eggs and dozens could be or
   2. ratios for eyes and humans could be or
   3. ratios for mL and liters could be or
   4. ratios for yards and fields could be or
2. Insert one of your ratios from above into each equation below in a way that the units will cancel. Use a calculator to write an answer that has correct UNITS and sig figs.

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| * 1. 225 eggs x   2. 13 humans x | * 1. 9.90 liters x   2. 55 football fields x |

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| 1. Estimate the level of liquid in the four containers. Remember: read between the lines and add only ONE MORE digit     \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. Equalities based on metric system and on the graph shown here:

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| * 1. Slope of A   2. Slope of B |  |

1. Use your two slopes from the graph to write ratios
   1. Two ways to write a ratio based on the Slope of Line A are

or

* 1. Two ways to write a ratio based on the Slope of Line B are

or

* 1. Two ways to write a ratio based on the Slope of Line C are

or

VI Insert one of your ratios from above into each equation below in a way that the units will cancel. Use a calculator to write an answer that has correct UNITS and sig figs.

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| * 1. 225 cm3 of “A” x   2. 4.50 g of “A” x | * 1. 0.48 g of “B” x   2. 1.65 cm3of “B” x |