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| Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Unit 1B(2) ~ Study Guide and Examples**  **Estimating Products (3-3)**   1. Round each # to the nearest whole # 2. Multiply   **Estimating Quotients (3-3)**   1. Find compatible #’s (Numbers that would divide equally) 2. Divide | Ex: Estimate a) 373 x 816 b) 46.418 ÷ 4.272 |
| Multiplying Decimals (3-4)   1. Multiply 2. Count all places to the right of the decimals 3. Starting at right in the product, count to the left the number of places in step #2 4. Place the decimal | Ex: Solve: 11.45 x 9.7 |
| **Dividing Decimals (3-6)**   1. Put the decimal point in the dividend 2. Bring up the decimal 3. Annex (add) zero after the decimal point in the dividend. 4. Bring down the zero 5. Divide 6. Continue to annex zeroes until there is no remainder | Ex: Solve: 9.4 ÷ 20 |
| **Dividing Decimals (3-7)**  1) Check to see if there is a decimal in the divisor  2) Move the decimal in the divisor to the right until it becomes a whole number  3) Move decimal in the dividend the same number of places to the right as in #2  4) Rewrite the problem  5) Bring up decimal  6) Divide | Ex: Solve: 0.16 ÷ 0.004 |
| **Multiplying & Dividing by 10, 100, and 1,000 (1-5)**  1) Multiplying – move decimal 1 place to right for each zero.  2) Dividing – move decimal 1 place to left for each zero. | Ex: a) 3.98 x 10 b) 48.12 ÷ 1000  c) 48 x 100 d)845 ÷ 100 |

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| **Adding/ Subtracting Decimals (3-2)**   1. Line up the decimals 2. Annex zeros to right of decimal(if needed) 3. Bring down decimal 4. Add or Subtract | Ex: Solve: a) 47.9 + 6.806 b) 38 – 2.95 |
| Charlie helped mow the lawn for 5.3 hours last week. His dad told him he would pay him $7.75 per hour. How much money should Charlie’s dad pay him? | Julie estimates that she can make 18 puzzles in a week. She sells each puzzle for $6.83. Estimate how much Julie will make in one week. |
| The sixth grade ordered 22 medium pizzas. Each cost $7.89. Estimate the cost of the pizzas. | Today you bought lunch for $4.27 and a snack for $2. Later you went to 7-11 and bought a pint of ice cream for your family for $6.40. How much did you spend altogether? |
| Write the following in standard form:  *Twenty- five billion, four hundered thousand,*  *and nine thousandths*. | Place the decimal point in the product.  0.315 x 2.3 = 7245 |
| Review   * When multiplying money, be sure there are only two places to left of decimal (you might need to round to nearest hundredth) * In a race, the fastest speed is the highest # * In a race, the best time is the lowest # | Review   * When estimating, round numbers to largest place first, then perform operation. |