Name Date

1. Fill in the chart.

|  |  |  |
| --- | --- | --- |
| **Words** | **Expression** | **The Value of the Expression** |
| 1. 50 times the sum of 64 and 36 |  |  |
| 1. Divide the difference between 1,200 and 700 by 5 |  |  |
| 1. The sum of 3 fifteens and 17 fifteens |  |  |
| 1. 15 times the sum of 14 and 6 |  |  |
|  | 10 × (250 + 45) |  |
|  | (560 + 440) × 14 |  |

1. Compare the two expressions using < , > , or = . For each, explain how you can determine the answer without calculating.
2. 100 × 8 25 × (4 × 9)
3. 48 × 12 50 twelves – 3 twelves
4. 24 × 36 18 twenty-fours, doubled
5. Solve. Use words, numbers, or pictures to explain how your answers to Parts (a) and (b) are related.
6. 25 × 30 = \_\_\_\_\_\_\_\_\_\_\_ b. 2.5 × 30 = \_\_\_\_\_\_\_\_\_\_\_ tenths × 30 = \_\_\_\_\_\_\_\_\_\_\_
7. Multiply using the standard algorithm. Show your work below each problem. Write the product in the blank.
8. 514 × 33 = \_\_\_\_\_\_\_\_\_\_\_ b. 546 × 405 = \_\_\_\_\_\_\_\_\_\_\_
9. For a field trip, the school bought 47 sandwiches for $4.60 each and 39 bags of chips for $1.25 each. How much did the school spend in all?
10. Jeanne makes hair bows to sell at the craft fair. Each bow requires 1.5 yards of ribbon.
11. At the fabric store, ribbon is sold by the foot. If Jeanne wants to make 84 bows, how many feet of ribbon must she buy? Show all your work.
12. If the ribbon costs 10¢ per foot, what is the total cost of the ribbon in dollars? Explain your reasoning, including how you decided where to place the decimal.
13. A manufacturer is making 1,000 times as many bows as Jeanne to sell in stores nationwide. Write an expression using exponents to show how many yards of ribbon the manufacturer will need. Do not calculate the total.

|  |  |
| --- | --- |
| Mid-Module Assessment Task  Standards Addressed | Topics A–D |
| **Write and interpret numerical expressions.**  **5.OA.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.  **5.OA.2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.*  Understand the place value system.  **5.NBT.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.  **5.NBT.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.  **Perform operations with multi-digit whole numbers and with decimals to hundredths.**  **5.NBT.5** Fluently multiply multi-digit whole numbers using the standard algorithm.  **5.NBT.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.  **Convert like measurement units within a given measurement system.**  **5.MD.1** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. | |

Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for each student is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the student CAN do now and, what they need to work on next.

| A Progression Toward Mastery | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item | STEP 1  Little evidence of reasoning without a correct answer.  (1 Point) | STEP 2  Evidence of some reasoning without a correct answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **1**  **5.OA.1**  **5.OA.2** | The student is able to answer one to three items correctly. | The student is able to answer four to six items correctly. | The student is able to answer eight to ten items correctly. | The student is able to answer all 12 items correctly. |
| **2**  **5.OA.2** | The student is unable to compare the expressions. | The student is able to correctly compare at least two pairs of expressions, but is unable to explain reasoning. | The student is able to correctly compare at least two pairs of expressions, and is able to explain reasoning on some parts of the task. | The student correctly compares all pairs of expressions, and is able to explain reasoning for all parts of the task. |
| **3**  **5.NBT.1**  **5.NBT.2**  **5.NBT.7** | The student is unable to correctly multiply either Part (a) or (b) and makes no attempt to explain the relationship between products. | The student is able to multiply either Part (a) or (b) correctly, but makes no attempt to explain the relationship between the products. | The student is able to correctly multiply both Parts (a) and (b), and provides some explanation of the relationship between the products. | The student correctly multiplies both parts of the task, and provides a complete explanation of the relationship between the products using words, numbers or pictures.   1. 750 2. 75 |
| **4**  **5.NBT.5** | The student does not use the standard algorithm or any strategy to multiply either Part (a) or (b). | The student does not use the standard algorithm, but uses another strategy to multiply Part (a) and/or Part (b). | The student uses the standard algorithm to multiply but makes errors in the partial products or the final product. | The student uses the standard algorithm to correctly multiply both Parts (a) and (b).   1. 16,962 2. 221,130 |
| **5**  **5.NBT.5**  **5.NBT.7** | The student uses incorrect reasoning and neither multiplies nor adds. | The student uses partially correct reasoning (multiplies but does not add, or adds but does not multiply), and makes calculation errors. | The student uses correct reasoning, but makes calculation errors. | The student uses correct reasoning and also calculates the total correctly as $264.95. |
| **6**  **5.OA.1**  **5.OA.2**  **5.NBT.1**  **5.NBT.2**  **5.NBT.5**  **5.NBT.7**  **5.MD.1** | The student uses incorrect reasoning in most parts of the task and is unable to correctly convert, calculate, and/or write an accurate expression. | The student uses some correct reasoning, and is able to answer one part of the task. | The student uses correct reasoning, but makes calculation errors on part of the task or writes an incorrect expression. | The student uses correct reasoning, correctly calculates all parts of the task, and writes a correct expression.   1. 378 ft 2. $37.80 3. 84 × 1.5 × 103 or 84 × 103 × 1.5 |





