1. The following equations involve different quantities and use different operations, yet produce the same result. Show and explain why this is true.

   $413 \times 10^2 = 41300$ $\quad\quad$ $4{,}130{,}000 \div 10^2 = 41300$

2. Solve the equations below.

   a. $423 \div 7 =$_____ $\quad\quad$ b. $1225 \div 6$ _____

   Explain how estimation will help check the reasonableness of your answers.

   c. $423 \div 7 =$_____ $\quad\quad$ d. $1225 \div 6$ _____

| A Progression Toward Mastery | | | | |
|---|---|---|---|---|
| **Assessment Task Item and Standards Assessed** | **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**<br>**5.NBT.1**<br>**5.NBT.2** | The student is unable to provide a correct response. | The student attempts but is not able to accurately show or explain reasoning fully. | The student correctly shows but does not show full reasoning, or explains reasoning fully. Work may not match explanation | The student correctly:<br>▪ Shows movement of digits.<br>▪ Explains movement of units to the left for multiplication and movement of units to the right for division. |
| **2**<br>**5.NBT.1**<br>**5.NBT.2**<br>**5.NBT.6** | The student is unable to solve and estimate either the dividend or the divisor to a one-digit fact. | The student solves and estimates the dividend and divisor, but not to a one-digit fact. | The student correctly solves and estimates to a one-digit fact for either Part (a) or Part (b). | The student correctly solves and estimates both Part (a) and Part (b) to a one-digit fact.<br>Solve a and b. Estimate c and d.<br>a. 60 R 3<br>b. 204 R 1<br>c. 420 ÷ 7 = 6<br>d. 1200 ÷ 6 = 200 |

**Generalize place value understanding for multi-digit whole numbers.**

**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.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.