

End-of-Module Assessment Task
Standards Addressed

Topics A–F

Use the four operations with whole numbers to solve problems.

- 4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Generalize place value understanding for multi-digit whole numbers.

- 4.NBT.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.*
- 4.NBT.2** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- 4.NBT.3** Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 4.NBT.4** Fluently add and subtract multi-digit whole numbers using the standard algorithm.

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 students is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the students CAN do now and what they need to work on next.

A Progression Toward Mastery

Assessment Task Item and Standards Addressed	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)
<p>1</p> <p>4.NBT.1</p>	The student provides limited reasoning about the relationship of the values of the 7s.	The student can reason about the relationship between the values of the 7s but does not show a supporting picture or numbers.	The student is able to reason about the relationship of the 7s, but her reasoning does not fully support her picture or numbers.	The student correctly reasons the 7 in the hundred thousands place is 10 times the value of the 7 in the ten thousands place, using a picture, numbers, or words to explain.
<p>2</p> <p>4.NBT.2 4.NBT.4</p>	The student correctly answers less than two of the four parts.	The student correctly answers two of the four parts.	The student correctly answers three of the four parts.	The student correctly answers all four parts: a. > b. > c. = d. <
<p>3</p> <p>4.NBT.1 4.NBT.2 4.NBT.3 4.NBT.4 4.OA.3</p>	The student correctly answers less than two of the five parts.	The student correctly answers two of the five parts.	The student answers four or five of the five parts correctly but with only some reasoning in Parts (b) and (e). OR The student answers three or four of the parts correctly with solid reasoning for all parts.	The student correctly answers all five parts: a. 984,810. b. The population of Baltimore is about 600,000. The population of Charleston is about 500,000 less than Baltimore, or 100,000. Therefore, 122,689 is a reasonable answer. c. Charleston, SC: One hundred twenty-two thousand, six hundred eighty-nine. $100,000 + 20,000 + 2,000 + 600 + 80 + 9$.



A Progression Toward Mastery

				<p>Baltimore, MD: Six hundred nineteen thousand, four hundred ninety-three. $600,000 + 10,000 + 9,000 + 400 + 90 + 3$.</p> <p>Norfolk, VA: Two hundred forty-two thousand, six hundred twenty-eight. $200,000 + 40,000 + 2,000 + 600 + 20 + 8$.</p> <p>d. Norfolk: $242,628 > 122,689$.</p> <p>e. Eddie is correct to think that Norfolk’s population is about 10 times that of Fredericksburg’s because Norfolk’s population is about 240,000, while Fredericksburg’s is about 24,000. 240,000 is ten times as many as 24,000.</p>
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Name Jack

Date _____

1. Compare the values of each 7 in the number 771,548. Use a picture, numbers, or words to explain.

The 7 in the hundred thousands place is ten times the value of the 7 in the ten thousands place.

$$10 \times 70,000 = 700,000$$

hundred thousands	ten thousands	thousands	hundreds	tens	ones
7	7	1	5	4	8
7	0	0	0	0	0
	7	0	0	0	0
		1	0	0	0
			5	0	0
				4	0
					8

2. Compare using >, <, or =. Write your answer inside the circle.

a. 234 thousands + 7 ten thousands $\textcircled{>}$ 241,000

$$\begin{array}{r} 234,000 \\ + 70,000 \\ \hline 304,000 \end{array}$$

b. 4 hundred thousands - 2 thousands $\textcircled{>}$ 200,000

$$\begin{array}{r} 400,000 \\ - 2,000 \\ \hline 398,000 \end{array}$$

c. 1 million $\textcircled{=}$ 4 hundred thousands + 6 hundred thousands

$$\begin{array}{r} 400,000 \\ + 600,000 \\ \hline 1,000,000 \end{array}$$

d. 709 thousands - 1 hundred thousand $\textcircled{<}$ 708 thousands

$$\begin{array}{r} 709,000 \\ - 100,000 \\ \hline 609,000 \end{array}$$

3. Norfolk, VA has a population of 242,628 people. Baltimore, MD has 376,865 more people than Norfolk. Charleston, SC has 496,804 less people than Baltimore.

- a. What is the total population of all three cities? Draw a tape diagram to model the word problem. Then solve the problem.

Norfolk 242,628 } 376,865
 Baltimore _____
 Charleston _____ } 496,804

$$\begin{array}{r}
 \text{Baltimore} \\
 242,628 \\
 + 376,865 \\
 \hline
 619,493 \\
 \text{Charleston} \\
 - 496,804 \\
 \hline
 122,689 \\
 \hline
 984,810
 \end{array}$$

The total population of all three cities is 984,810.

- b. Round to the nearest hundred thousand to check the reasonableness of your answer for the population of Charleston, SC.

Baltimore's population rounded to the nearest hundred thousand is 600,000. Charleston's population is about 500,000 less than Baltimore's population. $600,000 - 500,000 = 100,000$. The answer of 122,689 for the population of Charleston is reasonable because 122,689 rounded to the nearest hundred thousand is 100,000.

- c. Record each city's population in numbers, in words, and in expanded form.

Baltimore: 619,493 Six hundred nineteen thousand, four hundred ninety-three
 $600,000 + 10,000 + 9,000 + 400 + 90 + 3$

Norfolk: 242,628 two hundred forty-two thousand, six hundred twenty-eight
 $200,000 + 40,000 + 2,000 + 600 + 20 + 8$

Charleston: 122,689 one hundred twenty-two thousand, six hundred eighty-nine
 $100,000 + 20,000 + 2,000 + 600 + 80 + 9$

- d. Compare the population of Norfolk and Charleston using $>$, $<$, or $=$.

$$\begin{array}{c}
 \text{Norfolk} \\
 242,628 \\
 \text{Charleston} \\
 122,689
 \end{array}
 >$$

- e. Eddie lives in Fredericksburg, VA, which has a population of 24,286. He says that Norfolk's population is about 10 times as large as Fredericksburg's population. Explain Eddie's thinking.

Eddie's thinking is correct because Norfolk's population is 242,628 which can be rounded to 240,000. Fredericksburg's population can be rounded to 24,000. 240 thousands is ten times as large as 24 thousands.

H.Th.	T.Th.	Th.	H	T	O
2	4	0	0	0	0
24	40	0	0	0	0