

**NEBRASKA STATE
ACCOUNTABILITY**



**MATHEMATICS
ITEM AND SCORING SAMPLER
GRADE 5**

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GENERAL INTRODUCTION

The Nebraska Department of Education provides districts and schools with tools to assist in delivering focused instructional programs aligned to the state assessment system. These tools include Table of Specifications documents, administration manuals, and content-based item and scoring samplers. This Item and Scoring Sampler is a useful tool for Nebraska educators in the preparation of local instructional programs and the statewide NeSA-MATH.

SAMPLER CONTENTS

This sampler contains test questions (items) that have been written to align to the assessment indicators that are based on the Nebraska College- and Career-Ready Mathematics Standards. The test questions provide a simulation of the types of items that will appear on an operational Nebraska College- and Career-Ready NeSA-MATH. Each sample test question has been through a rigorous review process to ensure alignment with the assessment indicators.

PURPOSE AND USES

The purpose of the sampler is to expose teachers and administrators to new item types and to show how these items align to the revised Nebraska College- and Career-Ready Mathematics Standards. Many of the items provided in the sampler will be accessible to students in the form of MATH Practice Tests, Guided Practice Tests, and Online Tools Training resources.

ITEM FORMAT AND SCORING GUIDELINES

The Nebraska College- and Career-Ready NeSA-MATH has two types of test questions. The types of test questions are Multiple-Choice (MC) and Auto-Scored Constructed Response (ASCR).

MULTIPLE CHOICE (MC):

All MC items have four answer choices, including three distractors and one correct answer. Distractors represent common miscalculations, incorrect logic, common misinterpretations, unsound reasoning, etc. A correct response to an MC item is worth one point.

AUTO-SCORED CONSTRUCTED RESPONSE (ASCR):

ASCR item types provide a new forum in which to address higher-level thinking skills without the use of hand-scored test questions. Using the expansive features and functions of online testing, developers will incorporate technical enhancements to the test question, the response area, and/or the stimulus. Item types may include drag-and-drop, hot-spot, and in-line selection of multiple answers from drop-down menus. Students will be able to manipulate information within dynamic tasks such as dragging and pasting elements, using manipulatives, and selecting multiple answers from a variety of presentation methods. Each ASCR test question is worth 2 points.

DEPTH OF KNOWLEDGE

In addition to being aligned to the standards, the sample items included in this sampler were also developed with a particular emphasis on cognitive complexity, or Depth of Knowledge (DOK). The DOK level is also provided for each item in this sampler in the Item Information Table. DOK measures the level of cognitive demand required to complete an assessment item. The following descriptions show the expectations of the DOK levels in greater detail.

Level 1 (Recall) includes the recall of information such as a fact, definition, term, or a simple procedure, as well as performing a simple algorithm or applying a formula. That is, in mathematics, a one-step, well-defined, and straight algorithmic procedure should be included at this lowest level. Other key words that signify Level 1 include “identify,” “recall,” “recognize,” “use,” and “measure.” Verbs such as “describe” and “explain” could be classified at different levels, depending on what is to be described and explained.

Level 2 (Skill/Concept) includes the engagement of some mental processing beyond a habitual response. A Level 2 assessment item requires students to make some decisions as to how to approach the problem or activity, whereas Level 1 requires students to demonstrate a rote response, perform a well-known algorithm, follow a set procedure (like a recipe), or perform a clearly defined series of steps. Keywords that generally distinguish a Level 2 item include “classify,” “organize,” “estimate,” “make observations,” “collect and display data,” and “compare data.” These actions imply more than one step. For example, to compare data requires first identifying characteristics of objects or phenomena and then grouping or ordering the objects. Some action verbs, such as “explain,” “describe,” or “interpret,” could be classified at different levels depending on the object of the action. For example, interpreting information from a simple graph, or reading information from the graph, also are at Level 2. Interpreting information from a complex graph that requires some decisions on what features of the graph need to be considered and how information from the graph can be aggregated is at Level 3. Level 2 activities are not limited only to number skills, but may involve visualization skills and probability skills. Other Level 2 activities include noticing or describing non-trivial patterns; explaining the purpose and use of experimental procedures; carrying out experimental procedures; making observations and collecting data; classifying, organizing, and comparing data; and organizing and displaying data in tables, graphs, and charts.

Level 3 (Strategic Thinking) requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels. In most instances, requiring students to explain their thinking is at Level 3. Activities that require students to make conjectures are also at this level. The cognitive demands at Level 3 are complex and abstract. The complexity does not result from the fact that there are multiple answers, a possibility for both Levels 1 and 2, but because the task requires more demanding reasoning. An activity, however, that has more than one possible answer and requires students to justify the response they give would most likely be at Level 3. Other Level 3 activities include drawing conclusions from observations, citing evidence and developing a logical argument for concepts, explaining phenomena in terms of concepts, and deciding which concepts to apply in order to solve a complex problem.

ITEM AND SCORING SAMPLER FORMAT

Sample questions are provided in this sampler, along with any related stimulus information such as a passage or graphic. Following each test question is an item information table.

Example Response Item Information Table

Item Information		
Alignment	Assigned Indicator	Assigned indicator definition
Answer Key	Correct Answer	Option Annotations Brief answer option analysis or rationale
Depth of Knowledge	Assigned DOK	
Focus	Skill/Task	

The NeSA-MATH is administered primarily online. Although there is a paper-pencil format, the examples in this sampler include samples of students' responses in online format.

ADDITIONAL INFORMATION

For more information related to the Nebraska plan and schedule for making the transition to NeSA-Mathematics, see <http://www.education.ne.gov/Assessment> and select the link on the left titled "CCR MATH Transition."

MULTIPLE-CHOICE ITEMS

1. What is $4,376 \div 36$?

- A. 121
- B. 121R20
- C. 122
- D. 122R16

Item Information		
Alignment	MA 5.1.2.b	Divide four-digit whole numbers by a two-digit divisor, with and without remainders using the standard algorithm.
Answer Key	B	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to find the quotient of 4,376 and 36. Option B is the correct answer since $4,376 \div 36 = 121R20$. Option A is incorrect since the value does not include the remainder. Option C is incorrect since the value is rounded up to the next whole number. Option D is incorrect since the values of the whole number and remainder are not correct.</p>
Depth of Knowledge	1	
Focus	Dividing Whole Numbers with Remainders	

2. What is $\frac{1}{4} \div 3$?

A. $\frac{1}{12}$

B. $\frac{3}{4}$

C. $\frac{4}{3}$

D. 12

Item Information		
Alignment	MA 5.1.2.d	Divide a unit fraction by a whole number and a whole number by a unit fraction.
Answer Key	A	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to find the quotient of $\frac{1}{4}$ and 3. Option A is the correct answer since $\frac{1}{4} \div 3 = \frac{1}{12}$. Option B is incorrect since $\frac{3}{4}$ is the product of $\frac{1}{4}$ and 3. Option C is incorrect since $\frac{4}{3}$ is the product of $\frac{1}{3}$ and 4. Option D is incorrect since 12 is the quotient of $3 \div \frac{1}{4}$.</p>
Depth of Knowledge	1	
Focus	Dividing Unit Fraction by Whole Number	

3. Which set of ordered pairs could be generated by the rule $y = 7x$?
- A. $(0, 7), (1, 14), (3, 28)$
 - B. $(1, 7), (2, 14), (4, 28)$
 - C. $(7, 0), (14, 1), (28, 3)$
 - D. $(7, 1), (14, 2), (28, 4)$

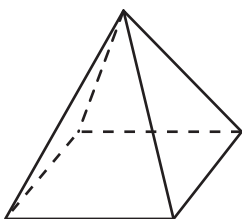
Item Information		
Alignment	MA 5.2.1.a	Form ordered pairs from a rule such as $y = 2x$, and graph the ordered pairs on a coordinate plane.
Answer Key	B	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to form a set of ordered pairs generated by the given rule. Option B is the correct answer since the set of ordered pairs is generated by the rule $y = 7x$; $7 = 7(1)$, $14 = 7(2)$, and $28 = 7(4)$. Option A is incorrect since the set of ordered pairs is generated by the rule $y = 7(x + 1)$. Option C is incorrect since the set of ordered pairs is generated by the rule $y = \frac{x}{7} - 1$. Option D is incorrect since the set of ordered pairs is generated by the rule $y = \frac{x}{7}$.</p>
Depth of Knowledge	2	
Focus	Forming Ordered Pairs from a Rule	

4. A recipe calls for $\frac{1}{4}$ pound of nuts, $\frac{1}{8}$ pound of candy pieces, and $\frac{1}{3}$ pound of dried fruit. What is the total weight, in pounds, of nuts, candy pieces, and dried fruit the recipe calls for?
- A. $\frac{1}{15}$
 - B. $\frac{3}{15}$
 - C. $\frac{17}{24}$
 - D. $\frac{17}{8}$

Item Information		
Alignment	MA 5.2.3.a	Solve real-world problems involving addition and subtraction of fractions and mixed numbers with like and unlike denominators.
Answer Key	C	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to solve the problem by adding the fractions $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{3}$. Option C is the correct answer since $\frac{1}{4} + \frac{1}{8} + \frac{1}{3} = \frac{17}{24}$. Option A is incorrect since the denominators 4, 8, and 3 are added to make 15 in $\frac{1}{15}$. Option B is incorrect since numerators 1, 1, and 1 are added to make 3, and denominators 4, 8, and 3, are added to make 15 in $\frac{3}{15}$. Option D is incorrect since the denominator 8 is not common to 4, 8, and 3.</p>
Depth of Knowledge	2	
Focus	Solving Real-World Problems with Addition of Fractions	

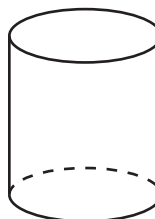
5. Which figure is labeled correctly?

A.



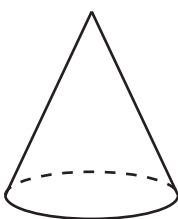
prism

B.



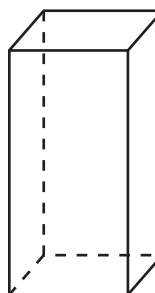
sphere

C.



cone

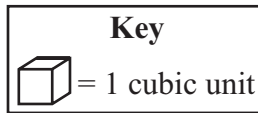
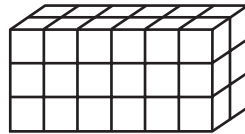
D.



cube

Item Information		
Alignment	MA 5.3.1.a	Identify three-dimensional figures including cubes, cones, pyramids, prisms, spheres, and cylinders.
Answer Key	C	<p style="text-align: center;">Option Annotations</p> The student is asked to identify the three-dimensional figure that is labeled correctly. Option C is the correct answer since the figure is a cone. Option A is incorrect since the figure is a pyramid. Option B is incorrect since the figure is a cylinder. Option D is incorrect since the figure is a prism.
Depth of Knowledge	1	
Focus	Identifying Three-Dimensional Figures	

6. Use the figure below to answer the question.



What is the volume of the figure?

- A. 11 units³
- B. 27 units³
- C. 34 units³
- D. 36 units³

Item Information		
Alignment	MA 5.3.3.b	Use concrete models to measure the volume of rectangular prisms in cubic units by counting cubic units.
Answer Key	D	Option Annotations The student is asked to find the volume of the figure shown. Option D is the correct answer since the figure has a volume of 36 cubic units. Option A is incorrect since 11 is the sum of the length, width, and height of the figure. Option B is incorrect since 27 is the number of visible faces in the picture of the figure. Option C is incorrect since 34 is two cubic units less than the volume of the figure.
Depth of Knowledge	2	
Focus	Measuring Volume by Counting Cubic Units	

7. Which is true?
- A. $4.09 > 4.50$
 - B. $2.31 > 2.18$
 - C. $5.23 < 5.14$
 - D. $6.80 < 6.29$

Item Information		
Alignment	MA 5.1.1.b	Compare whole numbers, fractions, mixed numbers, and decimals through the thousandths place and represent comparisons using symbols $<$, $>$, or $=$.
Answer Key	B	<p style="text-align: center;">Option Annotations</p> The student is asked to identify the comparison that is true. Option B is correct since 2.31 is greater than 2.18. Option A is incorrect since 4.09 is less than 4.50. Option C is incorrect since 5.23 is greater than 5.14. Option D is incorrect since 6.80 is greater than 6.29.
Depth of Knowledge	1	
Focus	Comparing Decimals in Tenths Place	

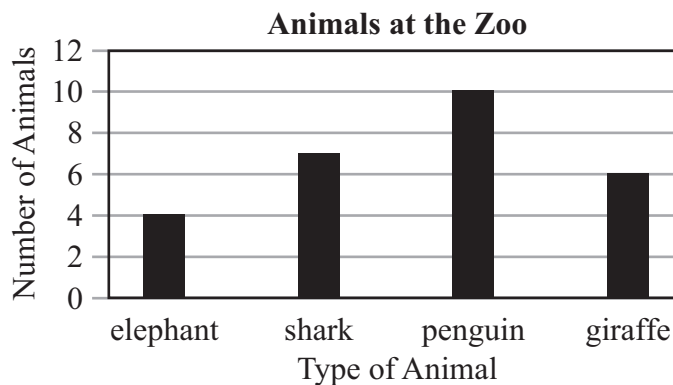
8. What is 9,887 rounded to the nearest thousand?
- A. 9,000
 - B. 9,800
 - C. 9,900
 - D. 10,000

Item Information		
Alignment	MA 5.1.1.c	Round whole numbers and decimals to any given place.
Answer Key	D	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to round the given number to the nearest thousand. Option D is the correct answer since the number rounded to the nearest thousand is 10,000. Option A is incorrect since the number rounded down to the next thousand is 9,000. Option B is incorrect since the number rounded down to the next hundred is 9,800. Option C is incorrect since the number rounded to the nearest hundred is 9,900.</p>
Depth of Knowledge	1	
Focus	Rounding Whole Numbers to Nearest Thousand	

9. When solving the expression $4 + 6 \div 2 \times 5 - 3$, which operation is performed first?
- A. $4 + 6$
 - B. $6 \div 2$
 - C. 2×5
 - D. $5 - 3$

Item Information		
Alignment	MA 5.2.2.a	Interpret and evaluate numerical or algebraic expressions using order of operations (excluding exponents).
Answer Key	B	Option Annotations The student is asked to identify the first step in simplifying the expression using order of operations. Option B is the correct answer since $6 \div 2$ is the first step in simplifying the expression using order of operations. Options A and D are incorrect since multiplication and division should be performed before addition and subtraction. Option C is incorrect since multiplication and division are performed from left to right within the expression.
Depth of Knowledge	1	
Focus	Evaluating Expressions Using Order of Operations	

10. Use the graph below to answer the question.



Which conclusion is true?

- A. There are six more giraffes than penguins.
- B. There are two more elephants than giraffes.
- C. There are three more penguins than sharks.
- D. There are eight more penguins than elephants.

Item Information		
Alignment	MA 5.4.2.a	Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (e.g., frequency charts) and bar graphs.
Answer Key	C	Option Annotations The student is asked to use the bar graph to determine which conclusion is true. Option C is the correct answer since there are 10 penguins and 7 sharks. Option A is incorrect since there are 6 giraffes and 10 penguins. Option B is incorrect since there are 4 elephants and 6 giraffes. Option D is incorrect since there are 10 penguins and 4 elephants.
Depth of Knowledge	1	
Focus	Interpreting Data from Bar Graphs	

11. What is 170×10 ?

- A. 17
- B. 170
- C. 1,700
- D. 17,000

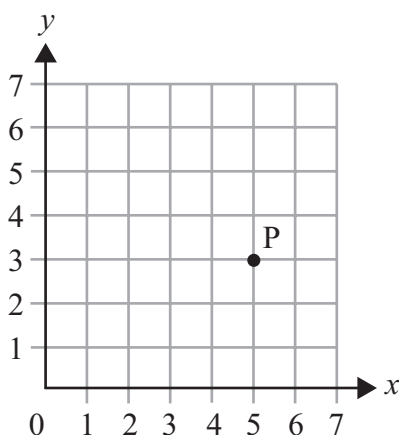
Item Information		
Alignment	MA 5.1.2.j	Multiply and divide by powers of 10.
Answer Key	C	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to find the product of 170 and 10. Option C is the correct answer since $170 \times 10 = 1,700$. Option A is incorrect since $170 \times 0.1 = 17$. Option B is incorrect since $170 \times 1 = 170$. Option D is incorrect since $170 \times 100 = 17,000$.</p>
Depth of Knowledge	1	
Focus	Multiplying by Powers of Ten	

12. Which number does 10^5 represent?

- A. 50
- B. 500
- C. 10,000
- D. 100,000

Item Information		
Alignment	MA 5.1.1.e	Write powers of 10 with exponents.
Answer Key	D	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to find the value of 10^5. Option D is the correct answer since $10^5 = 100,000$. Option A is incorrect since $10 \times 5 = 50$. Option B is incorrect since $10^2 \times 5 = 500$. Option C is incorrect since $10^4 = 10,000$.</p>
Depth of Knowledge	1	
Focus	Exponential Notation for Powers of Ten	

13. Use the coordinate grid below to answer the question.



What are the coordinates of point P?

- A. (3, 5)
- B. (5, 3)
- C. (5, 4)
- D. (6, 3)

Item Information		
Alignment	MA 5.3.2.b	Graph and name points in the first quadrant of the coordinate plane using ordered pairs of whole numbers.
Answer Key	B	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to identify the coordinates of the point shown on the coordinate plane. Option B is the correct answer since the point is located 5 units to the right and 3 units up from the origin. Option A is incorrect since the x- and y-coordinates of the point are reversed. Option C is incorrect since the y-coordinate of the point is not 4. Option D is incorrect since the x-coordinate of the point is not 6.</p>
Depth of Knowledge	1	
Focus	Naming Points Using Ordered Pairs	

14. What is the product of 18×24 ?

- A. 108
- B. 128
- C. 432
- D. 632

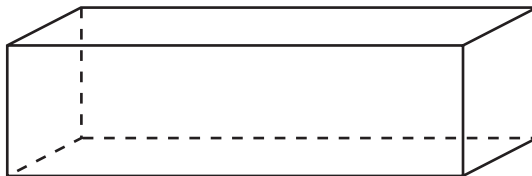
Item Information		
Alignment	MA 5.1.2.a	Multiply multi-digit whole numbers using the standard algorithm.
Answer Key	C	Option Annotations The student is asked to find the product of 18 and 24. Option C is the correct answer since $18 \times 24 = 432$. Options A, B, and D are incorrect due to regrouping or place value errors.
Depth of Knowledge	1	
Focus	Multiplying Two-Digit Whole Numbers	

15. What is the standard form of forty-five and nine tenths?

- A. 45.009
- B. 45.09
- C. 45.9
- D. 45.910

Item Information		
Alignment	MA 5.1.1.a	Determine multiple equivalent representations for whole numbers and decimals through the thousandths place using standard form, word form, and expanded notation.
Answer Key	C	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to use standard form to represent the given word form of the decimal. Option C is the correct answer since forty-five and nine tenths is the word form of 45.9. Option A is incorrect since forty-five and nine thousandths is the word form of 45.009. Option B is incorrect since forty-five and nine hundredths is the word form of 45.09. Option D is incorrect since forty-five and nine hundred ten thousandths is the word form of 45.910.</p>
Depth of Knowledge	1	
Focus	Word and Standard Forms of Decimals to Thousandths	

16. Use the picture below to answer the question.



How many edges does the right rectangular prism have?

- A. 6
- B. 8
- C. 10
- D. 12

Item Information		
Alignment	MA 5.3.1.b	Identify faces, edges, and vertices of rectangular prisms.
Answer Key	D	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to determine the number of edges of the figure shown. Option D is the correct answer since 12 is the number of edges of the figure. Option A is incorrect since 6 is the number of faces of the figure. Option B is incorrect since 8 is the number of vertices of the figure. Option C is incorrect since 10 is 2 less than the number of edges.</p>
Depth of Knowledge	1	
Focus	Identifying Edges of Rectangular Prisms	

17. Which set of steps shows the sum of $\frac{2}{3} + \frac{3}{4}$ in simplest form?

A. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{8}{12} + \frac{9}{12} \rightarrow \frac{17}{12} \rightarrow 1 \frac{5}{12}$

B. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{5}{7} + \frac{5}{7} \rightarrow \frac{10}{7} \rightarrow 1 \frac{3}{7}$

C. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{6}{12} + \frac{12}{12} \rightarrow \frac{18}{12} \rightarrow 1 \frac{1}{2}$

D. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{8}{12} + \frac{9}{12} \rightarrow \frac{17}{12} \rightarrow 1 \frac{7}{12}$

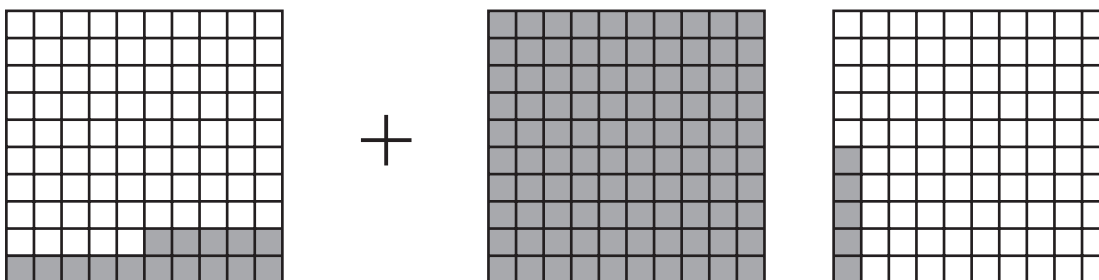
Item Information		
Alignment	MA 5.1.2.h	Add and subtract fractions and mixed numbers with unlike denominators.
Answer Key	A	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to identify the set of steps that shows the sum of $\frac{2}{3}$ and $\frac{3}{4}$ in simplest form. Option A is the correct answer since the set of steps correctly shows the sum of $\frac{2}{3}$ and $\frac{3}{4}$ in simplest form. Options B and C are incorrect since the sets of steps show the incorrect process in creating equivalent fractions with common denominators. Option D is incorrect since the set of steps shows the incorrect process of changing an improper fraction to a mixed number.</p>
Depth of Knowledge	2	
Focus	Adding Fractions with Unlike Denominators	

18. Which shows $\frac{3}{4}$ as a decimal?

- A. 0.25
- B. 0.34
- C. 0.43
- D. 0.75

Item Information		
Alignment	MA 5.1.1.d	Recognize and generate equivalent forms of commonly used fractions, decimals, and percents (e.g., halves, thirds, fourths, fifths, and tenths).
Answer Key	D	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to generate the decimal that is equivalent to the given fraction. Option D is the correct answer since 0.75 is equivalent to $\frac{3}{4}$. Option A is incorrect since 0.25 is equivalent to $\frac{1}{4}$. Option B is incorrect since 0.34 is equivalent to $\frac{34}{100}$. Option C is incorrect since 0.43 is equivalent to $\frac{43}{100}$.</p>
Depth of Knowledge	2	
Focus	Generating Equivalent Decimal from Fraction	

19. Use the graphic below to answer the question.



What is the sum of the fractions represented by the blocks?

- A. 0.12
- B. 1.155
- C. 1.2
- D. 1.65

Item Information		
Alignment	MA 5.1.2.g	Add, subtract, multiply, and divide decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations (i.e. Commutative, Associative, Distributive, Identity, Zero), and/or relationships between operations.
Answer Key	C	Option Annotations The student is asked to find the sum of the fractions represented by the blocks. Option C is the correct answer since $0.15 + 1.05 = 1.2$. Option A is incorrect since $0.015 + 0.105 = 0.12$. Option B is incorrect since $0.15 + 1.005 = 1.155$. Option D is incorrect since $0.15 + 1.5 = 1.65$.
Depth of Knowledge	2	
Focus	Adding Decimals Using Models	

20. Billy jumps 4 yards. What is the length of his jump, in inches?

- A. 40
- B. 48
- C. 124
- D. 144

Item Information		
Alignment	MA 5.3.3.c	Generate conversions within the customary and metric systems of measurement.
Answer Key	D	Option Annotations The student is asked to solve the problem by converting the measurement given in yards to inches. Option D is the correct answer since there are 12 feet in 4 yards, and 144 inches in 12 feet. Options A, B, and C, are incorrect since the measurements are not converted correctly.
Depth of Knowledge	2	
Focus	Converting Yards to Inches	

AUTO-SCORED CONSTRUCTED RESPONSE ITEMS

21. Move the digits into the boxes to complete each equation.

?

$14 \times 10 \square = 140,000$

$4,800,000 \div 10 \square = 480$

0 1 2 3 4

5 6 7 8 9

Answer Key – Completed Correct Response

Move the digits into the boxes to complete each equation.

?

$14 \times 10 \square 4 = 140,000$

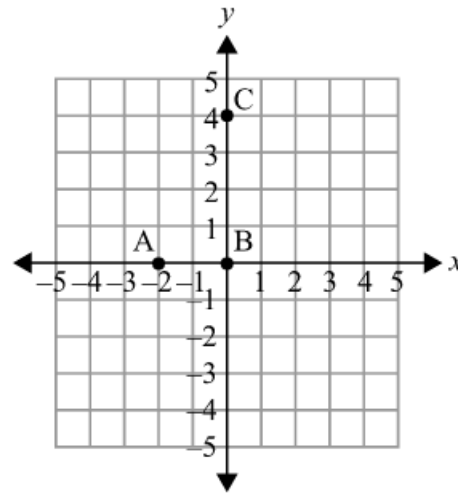
$4,800,000 \div 10 \square 4 = 480$

0 1 2 3 4

5 6 7 8 9

Item Information		
Alignment	MA 5.1.2.j	Multiply and divide by powers of 10.
Answer Key	see completed correct response	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to place the digits into the boxes to complete the equations. The digit 4 belongs in the top box to correctly complete the equation $14 \times 10^4 = 140,000$. The digit 4 belongs in the bottom box to correctly complete the equation $4,800,000 \div 10^4 = 480$.</p>
Depth of Knowledge	1	
Focus	Multiplying and Dividing by Powers of 10	

22. Use the graph below to answer the question.



Use the drop down menus to select points to complete each statement.

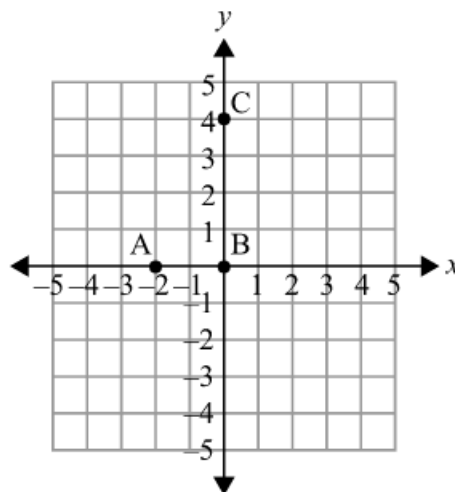
Point is located only on the x-axis.

Point is located only on the y-axis.

Point is located at the origin.

Answer Key – Completed Correct Response

Use the graph below to answer the question.



Use the drop down menus to select points to complete each statement.

Point is located only on the x-axis.

Point is located only on the y-axis.

Point is located at the origin.

Item Information		
Alignment	MA 5.3.2.a	Identify the origin, x-axis, and y-axis of the coordinate plane.
Answer Key	see completed correct response	<p style="text-align: center;">Option Annotations</p> <p>The student is asked to use the drop down menus to select the letter representing the correct point for each statement. The letter A belongs in the top box since point A is located at (-2, 0), which lies only on the x-axis. The letter C belongs in the middle box since point C is located at (0, 4), which lies only on the y-axis. The letter B belongs in the bottom box since point B is located at (0, 0), which is the origin.</p>
Depth of Knowledge	2	
Focus	Identifying Origin, and Axes of Coordinate Plane	

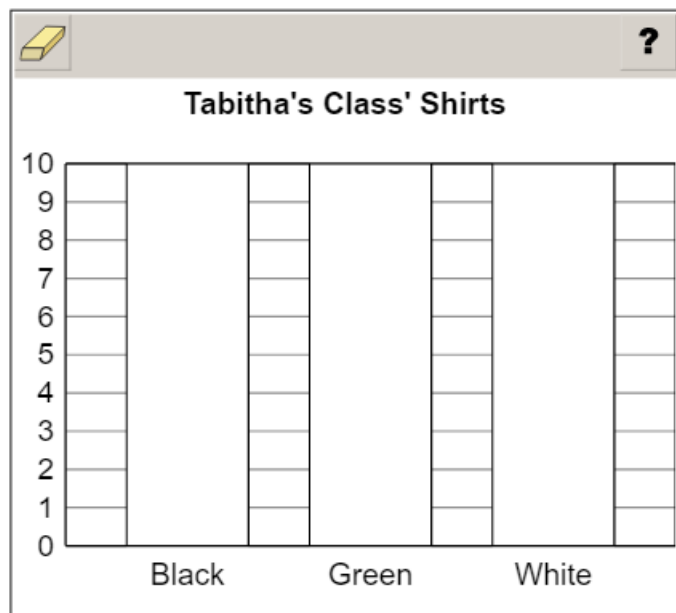
23. Use the table below to answer the question.

Tabitha's Class' Shirts

Color	Number of Students
Black	6
Green	9
White	10

The table shows the numbers of students in a class wearing black, green, and white shirts.

Select the numbers to make a bar graph that represents the data shown in the table.



Answer Key – Completed Correct Response

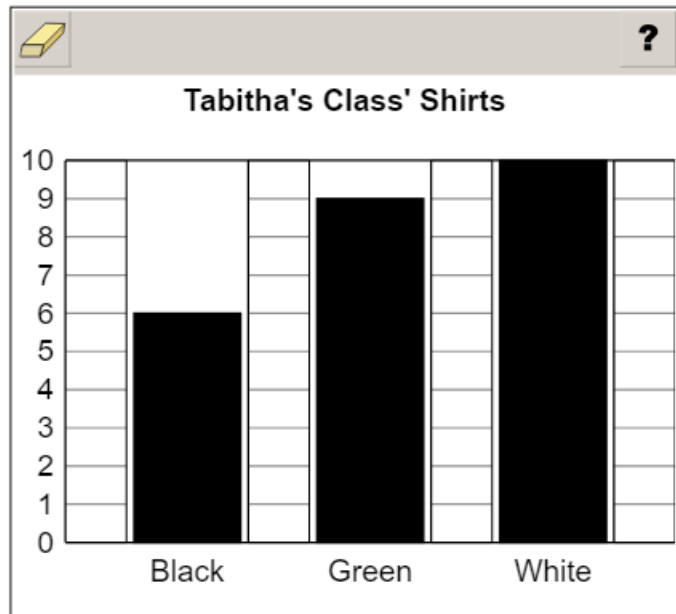
Use the table below to answer the question.

Tabitha's Class' Shirts

Color	Number of Students
Black	6
Green	9
White	10

The table shows the numbers of students in a class wearing black, green, and white shirts.

Select the numbers to make a bar graph that represents the data shown in the table.



Item Information		
Alignment	MA 5.4.2.a	Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (e.g., frequency charts) and bar graphs.
Answer Key	see completed correct response	Option Annotations The student is asked to make a bar graph that represents the data shown in the table. The bar for Black should extend up to 6 since the table shows 6 students wearing black shirts. The bar for Green should extend up to 9 since the table shows 9 students wearing green shirts. The bar for White should extend up to 10 since the table shows 10 students wearing white shirts.
Depth of Knowledge	2	
Focus	Representing Data Using Bar Graphs	

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**NeSA-MATHEMATICS
ITEM AND SCORING SAMPLER
GRADE 5**

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