



State of Texas Assessments of Academic Readiness

# **TEST INSTRUCTIONS**

## **GRADE 8 Mathematics STAAR Alternate 2**

**Administered April 2023**

**RELEASED**



## Texas Essential Knowledge and Skills (TEKS) Curriculum Assessed

<b>Math Grade 8</b>		<b>Cluster 1</b>
<b>Reporting Category 4</b>	Data Analysis and Personal Financial Literacy: The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts.	
<b>Knowledge and Skills Statement 8.12</b>	The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.	
<b>Essence Statement</b>	Compares the results of borrowing or investing money.	
<b>Item 1 Prerequisite Skill</b>	explain that saving is an alternative to spending (2)	
<b>Item 2 Prerequisite Skill</b>	identify decisions involving income, spending, saving, credit, and charitable giving (3)	
<b>Item 3 Prerequisite Skill</b>	list reasons to save and explain the benefit of a savings plan, including for college (3)	
<b>Item 4 Prerequisite Skill</b>	list reasons to save and explain the benefit of a savings plan, including for college (3)	

<b>Math Grade 8</b>		<b>Cluster 2</b>
<b>Reporting Category 3</b>	Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	
<b>Knowledge and Skills Statement 8.6</b>	The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas.	
<b>Essence Statement</b>	Identifies or models the relationships that are found in geometric formulas.	
<b>Item 5 Prerequisite Skill</b>	determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row (3)	
<b>Item 6 Prerequisite Skill</b>	determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row (3)	
<b>Item 7 Prerequisite Skill</b>	solve problems related to perimeter and area of rectangles where dimensions are whole numbers (4)	
<b>Item 8 Prerequisite Skill</b>	represent and solve problems related to perimeter and/or area and related to volume (5)	

<b>Math Grade 8</b>		<b>Cluster 3</b>
<b>Reporting Category 1</b>	Numerical Representations and Relationships: The student will demonstrate an understanding of how to represent and manipulate numbers and expressions.	
<b>Knowledge and Skills Statement 8.2</b>	The student applies mathematical process standards to represent and use real numbers in a variety of forms.	
<b>Essence Statement</b>	Recognizes or models relationships between different forms or sets of numbers.	
<b>Item 9 Prerequisite Skill</b>	compare and order decimals using concrete and visual models to the hundredths (4)	
<b>Item 10 Prerequisite Skill</b>	compare and order decimals using concrete and visual models to the hundredths (4)	
<b>Item 11 Prerequisite Skill</b>	compare and order two decimals to thousandths and represent comparisons using the symbols $>$ , $<$ , or $=$ (5)	
<b>Item 12 Prerequisite Skill</b>	compare and order two decimals to thousandths and represent comparisons using the symbols $>$ , $<$ , or $=$ (5)	

<b>Math Grade 8</b>		<b>Cluster 4</b>
<b>Reporting Category 2</b>	Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.	
<b>Knowledge and Skills Statement 8.8</b>	The student applies mathematical process standards to use one-variable equations or inequalities in problem situations.	
<b>Essence Statement</b>	Uses equations or inequalities to model and solve problems.	
<b>Item 13 Prerequisite Skill</b>	represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences (1)	
<b>Item 14 Prerequisite Skill</b>	represent one- and two- step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations (3)	
<b>Item 15 Prerequisite Skill</b>	represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity (4)	
<b>Item 16 Prerequisite Skill</b>	represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity (4)	

<b>Math Grade 8</b>		<b>Cluster 5</b>
<b>Reporting Category 2</b>	Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.	
<b>Knowledge and Skills Statement 8.8</b>	The student applies mathematical process standards to use one-variable equations or inequalities in problem situations.	
<b>Essence Statement</b>	Uses equations or inequalities to model and solve problems.	
<b>Item 17 Prerequisite Skill</b>	understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s) (1)	
<b>Item 18 Prerequisite Skill</b>	represent one- and two- step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations (3)	
<b>Item 19 Prerequisite Skill</b>	represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity (5)	
<b>Item 20 Prerequisite Skill</b>	represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity (5)	





# MATHEMATICS





## Presentation Instructions for Question 1

- *Present* Stimulus 1.
- *Direct* the student to Stimulus 1. *Communicate*: **This person is putting money into a piggy bank. This is a way to save money.**
- *Communicate*: **Find the person who is saving money.**

### Stimulus 1



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the person saving money,	➡	mark <b>A</b> for question 1 and move to question 2.
If the student does not find the person saving money,	➡	<ul style="list-style-type: none"> <li>• remove the stimulus;</li> <li>• wait at least five seconds; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After the five-second wait time, if the student finds the person saving money,	➡	mark <b>B</b> for question 1 and move to question 2.
After the five-second wait time, if the student does not find the person saving money,	➡	mark <b>C</b> for question 1 and move to question 2.

## Presentation Instructions for Question 2

- Present Stimulus 2a and 2b.
- Direct the student to Stimulus 2a. *Communicate:* This person is putting money into a piggy bank. This is one way to save money.
- Direct the student to each answer choice in Stimulus 2b. *Communicate:* This person is putting money into a jar. This person is spending money at a hair salon.
- *Communicate:* Find the person who is saving money.

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### Stimulus 2a



### Stimulus 2b



## Scoring Instructions

Student Action	Test Administrator Action
If the student finds the person saving money in a jar in Stimulus 2b,	➡ mark <b>A</b> for question 2 and move to question 3.
If the student does not find the person saving money in a jar in Stimulus 2b,	➡ <ul style="list-style-type: none"> <li>• model the desired student action by finding the person saving money in a jar in Stimulus 2b and <i>communicate</i> “<b>This person is saving money</b>”; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds the person saving money in a jar in Stimulus 2b,	➡ mark <b>B</b> for question 2 and move to question 3.
After teacher modeling, if the student does not find the person saving money in a jar in Stimulus 2b,	➡ mark <b>C</b> for question 2 and move to question 3.

### Presentation Instructions for Question 3

- Present Stimulus 3a and 3b.
- Direct the student to Stimulus 3a. *Communicate*: This person is putting money into a savings account that pays interest. Interest is money the bank pays people for keeping their money in a savings account. This person will leave her money in the savings account for one year.
- Direct the student to each answer choice in Stimulus 3b. *Communicate* the text in each answer choice.
- *Communicate*: Find what will happen to the amount of money in this person's savings account after one year.

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#### Stimulus 3a



#### Stimulus 3b

The amount of money in her account will decrease.

The amount of money in her account will stay the same.

\* The amount of money in her account will increase.

## Scoring Instructions

Student Action	Test Administrator Action
If the student finds “The amount of money in her account will increase” in Stimulus 3b,	➡ mark <b>A</b> for question 3 and move to question 4.
If the student does not find “The amount of money in her account will increase” in Stimulus 3b,	<p>➡ provide <b>one</b> of these allowable teacher assists to the student:</p> <ul style="list-style-type: none"> <li>• Highlight “decrease,” “same,” and “increase” in Stimulus 3b. <b>OR</b></li> <li>• Have the student define “increase” and “decrease.” <b>OR</b></li> <li>• Have the student explain what he or she knows about a savings account. <b>OR</b></li> <li>• Define “savings.”</li> </ul> <p>Replicate the initial presentation instructions.</p>
After the selected teacher assistance, if the student finds “The amount of money in her account will increase” in Stimulus 3b,	➡ mark <b>B</b> for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find “The amount of money in her account will increase” in Stimulus 3b,	➡ mark <b>C</b> for question 3 and move to question 4.

## Presentation Instructions for Question 4

- Present Stimulus 4a and 4b.
- Direct the student to Stimulus 4a. *Communicate:* **This person wants to save her money to buy a phone. She will put her money into a savings account that pays the most interest.**
- Direct the student to each answer choice in Stimulus 4b. *Communicate* the text in each answer choice.
- *Communicate:* **Find the option that would give this person the most money after one year.**

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### Stimulus 4a



### Stimulus 4b

\* Put the money into a savings account that pays 1% interest.

Put the money into a savings account that pays 0% interest.

Put the money into a piggy bank.

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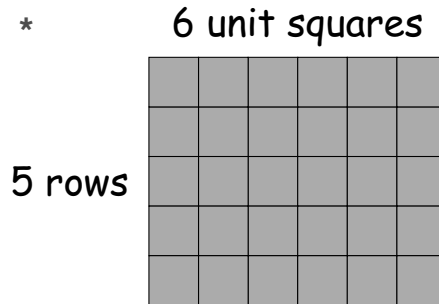
## Scoring Instructions

Student Action	Test Administrator Action
If the student finds “Put the money into a savings account that pays 1% interest” in Stimulus 4b,	➡ mark <b>A</b> for question 4 and move to question 5.
If the student does not find “Put the money into a savings account that pays 1% interest” in Stimulus 4b,	➡ replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds “Put the money into a savings account that pays 1% interest” in Stimulus 4b,	➡ mark <b>B</b> for question 4 and move to question 5.
After the teacher repeats the instructions, if the student does not find “Put the money into a savings account that pays 1% interest” in Stimulus 4b,	➡ mark <b>C</b> for question 4 and move to question 5.

## Presentation Instructions for Question 5

- *Present* Stimulus 5.
- *Direct* the student to Stimulus 5. *Communicate*: The area of this rectangle can be found by multiplying the number of rows by the number of unit squares in each row. The area is 5 times 6, which equals 30 square units.
- *Communicate*: Find the rectangle with an area of 30 square units.

### Stimulus 5



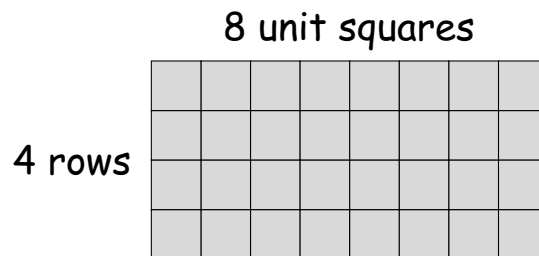
Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the rectangle,	➡	mark <b>A</b> for question 5 and move to question 6.
If the student does not find the rectangle,	➡	<ul style="list-style-type: none"> <li>• remove the stimulus;</li> <li>• wait at least five seconds; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After the five-second wait time, if the student finds the rectangle,	➡	mark <b>B</b> for question 5 and move to question 6.
After the five-second wait time, if the student does not find the rectangle,	➡	mark <b>C</b> for question 5 and move to question 6.



## Presentation Instructions for Question 6

- *Present* Stimulus 6a and 6b.
  - *Direct* the student to Stimulus 6a. *Communicate*: **The area of this rectangle can be found by multiplying the number of rows by the number of unit squares in each row.** *Communicate* the dimensions in Stimulus 6a.
  - *Direct* the student to each answer choice in Stimulus 6b. *Communicate* the information in each answer choice.
  - *Communicate*: **Find the equation that represents the area of the rectangle.**
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### Stimulus 6a



### Stimulus 6b

$$8 \div 4 = 2 \text{ square units}$$

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$$8 \times 4 = 32 \text{ square units}$$

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## Scoring Instructions

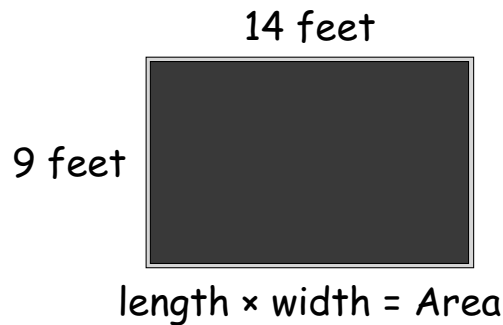
Student Action	Test Administrator Action
If the student finds " $8 \times 4 = 32$ square units" in Stimulus 6b,	➡ mark <b>A</b> for question 6 and move to question 7.
If the student does not find " $8 \times 4 = 32$ square units" in Stimulus 6b,	➡ <ul style="list-style-type: none"> <li>• model the desired student action by finding "<math>8 \times 4 = 32</math> square units" in Stimulus 6b and <i>communicate</i> "<b>This equation represents the area of the rectangle</b>"; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds " $8 \times 4 = 32$ square units" in Stimulus 6b,	➡ mark <b>B</b> for question 6 and move to question 7.
After teacher modeling, if the student does not find " $8 \times 4 = 32$ square units" in Stimulus 6b,	➡ mark <b>C</b> for question 6 and move to question 7.

## Presentation Instructions for Question 7

- Present Stimulus 7a and 7b.
- Direct the student to Stimulus 7a. *Communicate:* **Stephanie is measuring a rug in her living room. The length of the rug measures 14 feet. The width of the rug measures 9 feet.** *Communicate* the dimensions and the formula in Stimulus 7a.
- Direct the student to each answer choice in Stimulus 7b. *Communicate* the information in each answer choice.
- *Communicate:* **Find the equation that represents the area of the rug.**

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### Stimulus 7a



### Stimulus 7b

$$14 \times 14 = 196 \text{ square feet}$$

$$* 14 \times 9 = 126 \text{ square feet}$$

$$9 \times 9 = 81 \text{ square feet}$$

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## Scoring Instructions

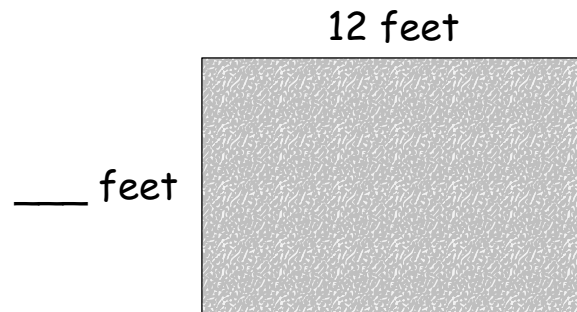
Student Action	Test Administrator Action
If the student finds “ $14 \times 9 = 126$ square feet” in Stimulus 7b,	➡ mark <b>A</b> for question 7 and move to question 8.
If the student does not find “ $14 \times 9 = 126$ square feet” in Stimulus 7b,	➡ provide <b>one</b> of these allowable teacher assists to the student: <ul style="list-style-type: none"> <li>• Highlight the formula for Area in Stimulus 7a. <b>OR</b></li> <li>• Have the student explain how to find the area of a rectangle.</li> </ul> Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds “ $14 \times 9 = 126$ square feet” in Stimulus 7b,	➡ mark <b>B</b> for question 7 and move to question 8.
After the selected teacher assistance, if the student does not find “ $14 \times 9 = 126$ square feet” in Stimulus 7b,	➡ mark <b>C</b> for question 7 and move to question 8.

## Presentation Instructions for Question 8

- Present Stimulus 8a and 8b.
- Direct the student to Stimulus 8a. *Communicate*: Stephanie is putting down tile on her bathroom floor. She will use 96 square feet of tile to cover the floor. Her bathroom floor is 12 feet long. The width of her bathroom floor is missing. *Communicate* the information in Stimulus 8a.
- Direct the student to each answer choice in Stimulus 8b. *Communicate* the information in each answer choice.
- *Communicate*: Find the missing width of Stephanie’s bathroom floor.

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### Stimulus 8a



$$\text{length} \times \text{width} = \text{Area}$$

$$12 \text{ feet} \times \text{___ feet} = 96 \text{ square feet}$$

### Stimulus 8b

108

\* 8

84

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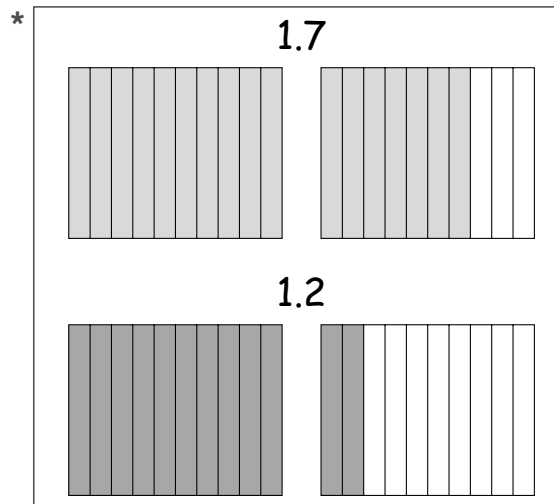
## Scoring Instructions

Student Action		Test Administrator Action
If the student finds "8" in Stimulus 8b,	➡	mark <b>A</b> for question 8 and move to question 9.
If the student does not find "8" in Stimulus 8b,	➡	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds "8" in Stimulus 8b,	➡	mark <b>B</b> for question 8 and move to question 9.
After the teacher repeats the instructions, if the student does not find "8" in Stimulus 8b,	➡	mark <b>C</b> for question 8 and move to question 9.

## Presentation Instructions for Question 9

- *Present* Stimulus 9.
- *Direct* the student to the model on the top in Stimulus 9. *Communicate*: **This decimal model represents the number one and seven-tenths.**
- *Direct* the student to the model on the bottom in Stimulus 9. *Communicate*: **This decimal model represents the number one and two-tenths. One and seven-tenths is greater than one and two-tenths.**
- *Communicate*: **Find the models that compare one and seven-tenths and one and two-tenths.**

### Stimulus 9



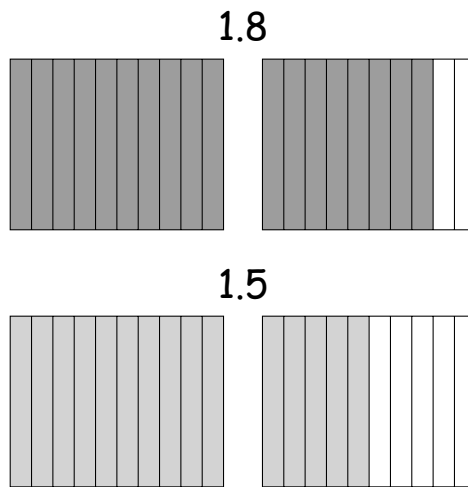
### Scoring Instructions

Student Action		Test Administrator Action
If the student finds the models,	➡	mark <b>A</b> for question 9 and move to question 10.
If the student does not find the models,	➡	<ul style="list-style-type: none"> <li>• remove the stimulus;</li> <li>• wait at least five seconds; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After the five-second wait time, if the student finds the models,	➡	mark <b>B</b> for question 9 and move to question 10.
After the five-second wait time, if the student does not find the models,	➡	mark <b>C</b> for question 9 and move to question 10.

## Presentation Instructions for Question 10

- Present Stimulus 10a and 10b.
  - Direct the student to the model on the top in Stimulus 10a. *Communicate:* **This decimal model represents the number one and eight-tenths.**
  - Direct the student to the model on the bottom in Stimulus 10a. *Communicate:* **This decimal model represents the number one and five-tenths. One and eight-tenths is greater than one and five-tenths.**
  - Direct the student to each answer choice in Stimulus 10b. *Communicate* the information in each answer choice.
  - *Communicate:* **Find the number that is greater than one and five-tenths.**
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### Stimulus 10a



### Stimulus 10b

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## Scoring Instructions

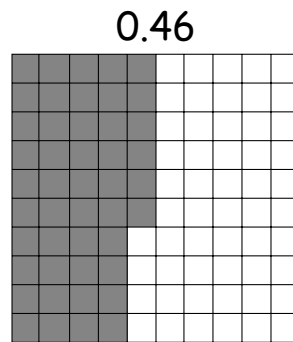
Student Action	Test Administrator Action
If the student finds “1.8” in Stimulus 10b,	➡ mark <b>A</b> for question 10 and move to question 11.
If the student does not find “1.8” in Stimulus 10b,	➡ <ul style="list-style-type: none"> <li>• model the desired student action by finding “1.8” in Stimulus 10b and <i>communicate</i> “<b>This number is greater than one and five-tenths</b>”; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds “1.8” in Stimulus 10b,	➡ mark <b>B</b> for question 10 and move to question 11.
After teacher modeling, if the student does not find “1.8” in Stimulus 10b,	➡ mark <b>C</b> for question 10 and move to question 11.

## Presentation Instructions for Question 11

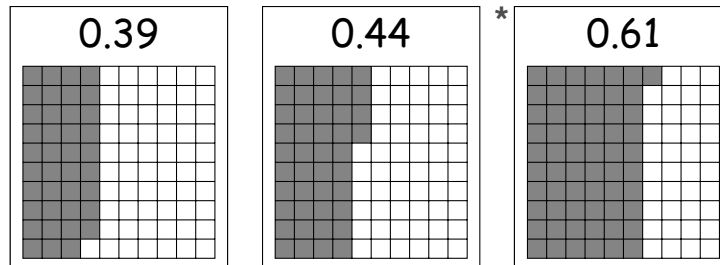
- Present Stimulus 11a and 11b.
- Direct the student to Stimulus 11a. *Communicate:* This decimal model represents the number **forty-six hundredths**.
- Direct the student to each answer choice in Stimulus 11b. *Communicate* the information in each answer choice.
- *Communicate:* Find the decimal model that represents a number greater than forty-six hundredths.

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### Stimulus 11a



### Stimulus 11b



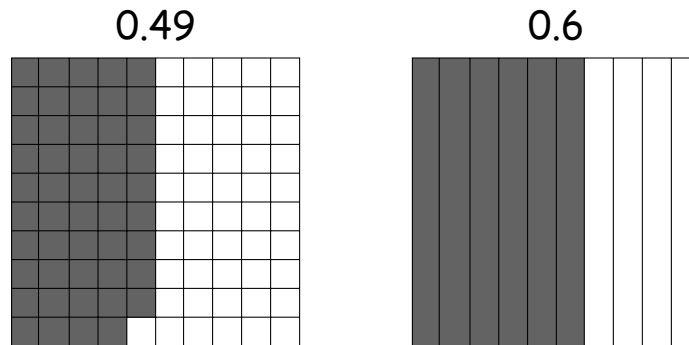
## Scoring Instructions

Student Action	Test Administrator Action
If the student finds the decimal model that represents 0.61 in Stimulus 11b,	➡ mark <b>A</b> for question 11 and move to question 12.
If the student does not find the decimal model that represents 0.61 in Stimulus 11b,	➡ provide <b>one</b> of these allowable teacher assists to the student: <ul style="list-style-type: none"> <li>• Highlight the number above each model in Stimulus 11b. <b>OR</b></li> <li>• Have the student describe what “greater than” means. <b>OR</b></li> <li>• Trace or highlight the shaded part of each model in Stimulus 11a and 11b. <b>OR</b></li> <li>• Use manipulatives to model the numbers in Stimulus 11a and 11b.</li> </ul> Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds the decimal model that represents 0.61 in Stimulus 11b,	➡ mark <b>B</b> for question 11 and move to question 12.
After the selected teacher assistance, if the student does not find the decimal model that represents 0.61 in Stimulus 11b,	➡ mark <b>C</b> for question 11 and move to question 12.

## Presentation Instructions for Question 12

- Present Stimulus 12a and 12b.
  - Direct the student to Stimulus 12a. *Communicate:* These are two models that represent different decimals. Forty-nine hundredths. Six-tenths.
  - Direct the student to each answer choice in Stimulus 12b. *Communicate* the text in each answer choice.
  - *Communicate:* Find the sentence that describes the relationship between the two decimals.
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Stimulus 12a



Stimulus 12b

0.49 is greater than 0.6.

0.49 is equal to 0.6.

\* 0.49 is less than 0.6.

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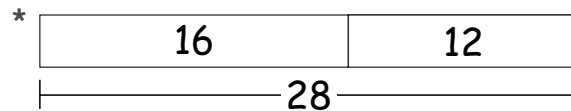
## Scoring Instructions

Student Action	Test Administrator Action
If the student finds “0.49 is less than 0.6” in Stimulus 12b,	➡ mark <b>A</b> for question 12 and move to question 13.
If the student does not find “0.49 is less than 0.6” in Stimulus 12b,	➡ replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds “0.49 is less than 0.6” in Stimulus 12b,	➡ mark <b>B</b> for question 12 and move to question 13.
After the teacher repeats the instructions, if the student does not find “0.49 is less than 0.6” in Stimulus 12b,	➡ mark <b>C</b> for question 12 and move to question 13.

## Presentation Instructions for Question 13

- *Present* Stimulus 13.
- *Direct* the student to Stimulus 13. *Communicate*: This strip diagram shows that Jordan ran a total of 28 miles last weekend. He ran 16 miles on Saturday and 12 miles on Sunday.
- *Communicate*: Find the strip diagram that shows how many miles Jordan ran over the weekend.

### Stimulus 13

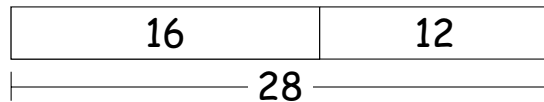


Scoring Instructions	
Student Action	Test Administrator Action
If the student finds the strip diagram,	➡ mark <b>A</b> for question 13 and move to question 14.
If the student does not find the strip diagram,	➡ <ul style="list-style-type: none"> <li>• remove the stimulus;</li> <li>• wait at least five seconds; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After the five-second wait time, if the student finds the strip diagram,	➡ mark <b>B</b> for question 13 and move to question 14.
After the five-second wait time, if the student does not find the strip diagram,	➡ mark <b>C</b> for question 13 and move to question 14.

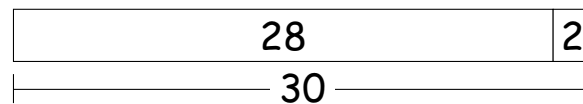
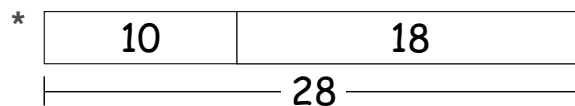
## Presentation Instructions for Question 14

- Present Stimulus 14a and 14b.
- Direct the student to Stimulus 14a. *Communicate*: This strip diagram shows that Jordan ran a total of 28 miles last weekend. He ran 16 miles on Saturday and 12 miles on Sunday.
- Direct the student to each answer choice in Stimulus 14b. *Communicate*: These are two strip diagrams that show different numbers of miles. *Communicate* the information in each answer choice.
- *Communicate*: Find the strip diagram that shows a total of 28 miles.

### Stimulus 14a



### Stimulus 14b



## Scoring Instructions

Student Action		Test Administrator Action
If the student finds the strip diagram labeled “28” in Stimulus 14b,	➡	mark <b>A</b> for question 14 and move to question 15.
If the student does not find the strip diagram labeled “28” in Stimulus 14b,	➡	<ul style="list-style-type: none"> <li>• model the desired student action by finding the strip diagram labeled “28” in Stimulus 14b and <i>communicate</i> “<b>This strip diagram shows a total of 28 miles</b>”; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds the strip diagram labeled “28” in Stimulus 14b,	➡	mark <b>B</b> for question 14 and move to question 15.
After teacher modeling, if the student does not find the strip diagram labeled “28” in Stimulus 14b,	➡	mark <b>C</b> for question 14 and move to question 15.

## Presentation Instructions for Question 15

- *Present* Stimulus 15a and 15b.
- *Direct* the student to Stimulus 15a. *Communicate*: **This strip diagram shows that Jordan rode his bike 18 miles on Friday, 22 miles on Saturday, and 16 miles on Sunday.**
- *Direct* the student to the variable in Stimulus 15a. *Communicate*: **The letter  $n$  represents the total number of miles Jordan rode during the three days.**
- *Direct* the student to each answer choice in Stimulus 15b. *Communicate* the information in each answer choice.
- *Communicate*: **Find the total miles Jordan rode his bike.**

### Stimulus 15a

18	22	16
$n$		

### Stimulus 15b

40	36	* 56
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### Scoring Instructions

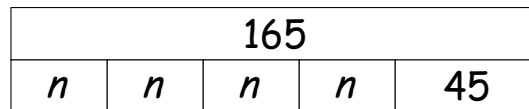
Student Action	Test Administrator Action
If the student finds “56” in Stimulus 15b,	➔ mark <b>A</b> for question 15 and move to question 16.
If the student does not find “56” in Stimulus 15b,	➔ provide <b>one</b> of these allowable teacher assists to the student: <ul style="list-style-type: none"> <li>• Have the student use a calculator or math chart. <b>OR</b></li> <li>• Highlight the cell labeled “<math>n</math>” in Stimulus 15a.</li> </ul> Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds “56” in Stimulus 15b,	➔ mark <b>B</b> for question 15 and move to question 16.
After the selected teacher assistance, if the student does not find “56” in Stimulus 15b,	➔ mark <b>C</b> for question 15 and move to question 16.



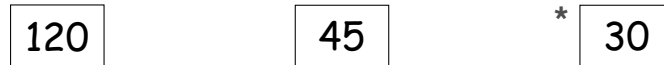
## Presentation Instructions for Question 16

- *Present* Stimulus 16a and 16b.
- *Direct* the student to Stimulus 16a. *Communicate*: **Jordan rides his bike a total of 165 miles over a five-day period. He rides an equal distance on each of the first four days. On the fifth day, he rides 45 miles.**
- *Direct* the student to the variables in the strip diagram in Stimulus 16a. *Communicate*: **The letter  $n$  represents the number of miles Jordan rides on the first four days.**
- *Direct* the student to each answer choice in Stimulus 16b. *Communicate* the information in each answer choice.
- *Communicate*: **Find the number of miles Jordan rides each day on the first four days.**

### Stimulus 16a



### Stimulus 16b



### Scoring Instructions

Student Action		Test Administrator Action
If the student finds “30” in Stimulus 16b,	➡	mark <b>A</b> for question 16 and move to question 17.
If the student does not find “30” in Stimulus 16b,	➡	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds “30” in Stimulus 16b,	➡	mark <b>B</b> for question 16 and move to question 17.
After the teacher repeats the instructions, if the student does not find “30” in Stimulus 16b,	➡	mark <b>C</b> for question 16 and move to question 17.

## Presentation Instructions for Question 17

- *Present* Stimulus 17.
- *Direct* the student to Stimulus 17. *Communicate*: **There are 36 doughnuts at a bakery. The baker sold 20 of the doughnuts. This equation shows 36 minus 20 equals 16.**
- *Communicate*: **Find the equation that equals 16.**

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Stimulus 17

\*  $36 - 20 = 16$

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Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the equation,	➡	mark <b>A</b> for question 17 and move to question 18.
If the student does not find the equation,	➡	<ul style="list-style-type: none"><li>• remove the stimulus;</li><li>• wait at least five seconds; and</li><li>• replicate the initial presentation instructions.</li></ul>
After the five-second wait time, if the student finds the equation,	➡	mark <b>B</b> for question 17 and move to question 18.
After the five-second wait time, if the student does not find the equation,	➡	mark <b>C</b> for question 17 and move to question 18.

## Presentation Instructions for Question 18

- Present Stimulus 18a and 18b.
- Direct the student to Stimulus 18a. *Communicate*: **A baker made 82 vanilla cupcakes and 76 chocolate cupcakes. The bakery sold 60 cupcakes over the weekend. This equation shows 82 plus 76 minus 60 equals 98.**
- Direct the student to each answer choice in Stimulus 18b. *Communicate* the information in each answer choice.
- *Communicate*: **Find another equation that equals 98.**

### Stimulus 18a

$$82 + 76 - 60 = 98$$

### Stimulus 18b

$$98 + 22 - 20 = 100$$

\*

$$76 + 100 - 78 = 98$$

## Scoring Instructions

Student Action		Test Administrator Action
If the student finds “76 + 100 – 78 = 98” in Stimulus 18b,	➡	mark <b>A</b> for question 18 and move to question 19.
If the student does not find “76 + 100 – 78 = 98” in Stimulus 18b,	➡	<ul style="list-style-type: none"> <li>• model the desired student action by finding “76 + 100 – 78 = 98” in Stimulus 18b and <i>communicate</i> “<b>This equation equals 98</b>”; and</li> <li>• replicate the initial presentation instructions.</li> </ul>
After teacher modeling, if the student finds “76 + 100 – 78 = 98” in Stimulus 18b,	➡	mark <b>B</b> for question 18 and move to question 19.
After teacher modeling, if the student does not find “76 + 100 – 78 = 98” in Stimulus 18b,	➡	mark <b>C</b> for question 18 and move to question 19.

## Presentation Instructions for Question 19

- Present Stimulus 19a and 19b.
- Direct the student to Stimulus 19a. *Communicate:* Mrs. Smith made 65 chocolate chip cookies and 45 peanut butter cookies for a bake sale. She sold 80 cookies. The letter  $n$  represents the number of cookies that are left. *Communicate* the information in the equation.
- Direct the student to each answer choice in Stimulus 19b. *Communicate* the information in each answer choice.
- *Communicate:* Find the number of cookies that are left.

### Stimulus 19a

$$65 + 45 - 80 = n$$

### Stimulus 19b

$$n = 110$$

$$n = 190$$

$$* n = 30$$

### Scoring Instructions

Student Action		Test Administrator Action
If the student finds " $n = 30$ " in Stimulus 19b,	➔	mark <b>A</b> for question 19 and move to question 20.
If the student does not find " $n = 30$ " in Stimulus 19b,	➔	provide <b>one</b> of these allowable teacher assists to the student: <ul style="list-style-type: none"> <li>• Have the student use a math chart. <b>OR</b></li> <li>• Highlight the operation signs in the equation in Stimulus 19a. <b>OR</b></li> <li>• Use a blank card to reveal one operation at a time in the equation in Stimulus 19a.</li> </ul> Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds " $n = 30$ " in Stimulus 19b,	➔	mark <b>B</b> for question 19 and move to question 20.
After the selected teacher assistance, if the student does not find " $n = 30$ " in Stimulus 19b,	➔	mark <b>C</b> for question 19 and move to question 20.

## Presentation Instructions for Question 20

- Present Stimulus 20a and 20b.
- Direct the student to Stimulus 20a. *Communicate:* Mrs. Smith made 16 chocolate cupcakes and 20 vanilla cupcakes. She divided them equally into 3 containers.
- Direct the student to each answer choice in Stimulus 20b. *Communicate* the information in each answer choice.
- *Communicate:* Find the number of cupcakes that are in each container.

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Stimulus 20a

$$(16 + 20) \div 3 = n$$

Stimulus 20b

\*  $n = 12$

$n = 36$

$n = 39$

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### Scoring Instructions

Student Action		Test Administrator Action
If the student finds “ $n = 12$ ” in Stimulus 20b,	➡	mark <b>A</b> for question 20.
If the student does not find “ $n = 12$ ” in Stimulus 20b,	➡	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds “ $n = 12$ ” in Stimulus 20b,	➡	mark <b>B</b> for question 20.
After the teacher repeats the instructions, if the student does not find “ $n = 12$ ” in Stimulus 20b,	➡	mark <b>C</b> for question 20.

**TEST  
INSTRUCTIONS**

**STAAR ALTERNATE 2  
GRADE 8  
Mathematics  
April 2023**

