

***Grades 3–4 Mathematics  
Training Test  
Answer Key***

**Question 1**  
**Grade 3**

**1**



What is 78 rounded to the nearest ten?

- Ⓐ 70
- Ⓑ 75
- Ⓒ 80
- Ⓓ 100

*Option A is incorrect because the number was rounded down.*

*Option B is incorrect because the number was not rounded to a tens place.*

*Option C is correctly rounded to the nearest 10.*

*Option D is incorrect because the number was rounded to the nearest 100.*

**Question 2**  
**Grade 4**

**2**



Which decimal is greater than 0.8?

- Ⓐ 0.70
- Ⓑ 0.75
- Ⓒ 0.80
- Ⓓ 0.85

*Option A is incorrect because the number is less than the decimal.*  
*Option B is incorrect because the number is less than the decimal.*  
*Option C is incorrect because it is equal to the decimal.*  
*Option D is correct because the number is greater than the decimal.*

Question 3  
Grade 4



Use the Connect Line tool to create a rectangle with an area of 24 square units.

A digital workspace for a geometry problem. At the top, there are three buttons: 'Delete' with a red 'X' icon, 'Add Point' with a red asterisk icon, and 'Connect Line' with a red double-headed arrow icon. Below these is a large grid. A red rectangle is drawn on the grid, spanning 3 units horizontally and 4 units vertically. In the bottom right corner of the grid, there is a scale bar labeled '1 unit' with a horizontal line and vertical tick marks. Below the grid is a white rectangular input box.

**Other Correct Responses:**

- Any rectangle that has an area of 24 units; the area is found by multiplying the base and the height.

Question 4  
Grade 4

4



A bakery uses 48 pounds of flour each day. It orders flour every 28 days.

Create an equation that shows how many pounds of flour the bakery needs to order every 28 days.

$$48 \times 28 = 1344$$

← → ↶ ↷ ✕

1	2	3	+	-	×	÷
4	5	6	<	=	>	
7	8	9	$\frac{\square}{\square}$	( )		
0	.					

**Other Correct Responses:**

- $28 \times 48 = 1,344$
- Any equivalent equation derived from the Commutative Property of Multiplication

Question 5  
Grade 3

5



Delete

James has 12 star stickers. He wants to divide them equally into 4 groups.

- Drag the stars to the rectangles to divide the 12 stars equally.
- Drag numbers to each box to form an equation that models how you divided the stars.

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

**Other Correct Responses:**

- $12 \div 3 = 4$
- *The student placed 3 stickers in each group of 4 to model 12 and created a division equation that is modeled.*

Question 6  
Grade 3

6



Select all the expressions that have the same value as  $30 \div 10$ .

- $1 \times 3$
- $10 \div 30$
- $30 \times 10$
- $30 \div 10 \div 1$
- $30 \div (2 \div 5)$
- $(30 \div 2) \div 5$

*The first option is correct because it is equal to 3.*

*The second option is incorrect because it is equal to  $\frac{1}{3}$ .*

*The third option is incorrect because it is equal to 300.*

*The fourth option is correct because it is equal to 3.*

*The fifth option is incorrect because it is equal to 75.*

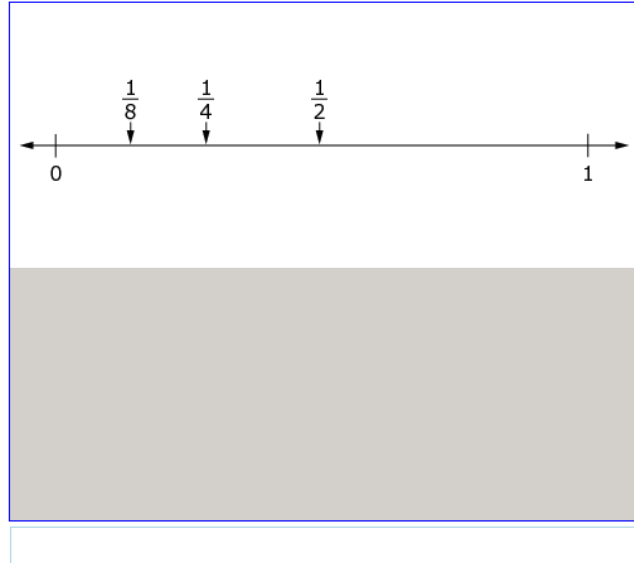
*The sixth option is correct because it is equal to 3.*

Question 7  
Grade 4

7



Place the fractions in the correct location on the number line.





**Question 8**  
**Grade 3**

**8**



Select all the expressions that have a value of 48.

- $(3 + 3) \times 8$
- $3 + (3 \times 8)$
- $6 \times 4 + 4$
- $6 \times (4 + 4)$
- $8 \times 40$

*The first option is correct because it is equal to 48.*

*The second option is incorrect because it is equal to 27.*

*The third option is incorrect because it is equal to 28.*

*The fourth option is correct because it is equal to 48.*

*The fifth option is incorrect because it is equal to 320.*

Question 9  
Grade 3

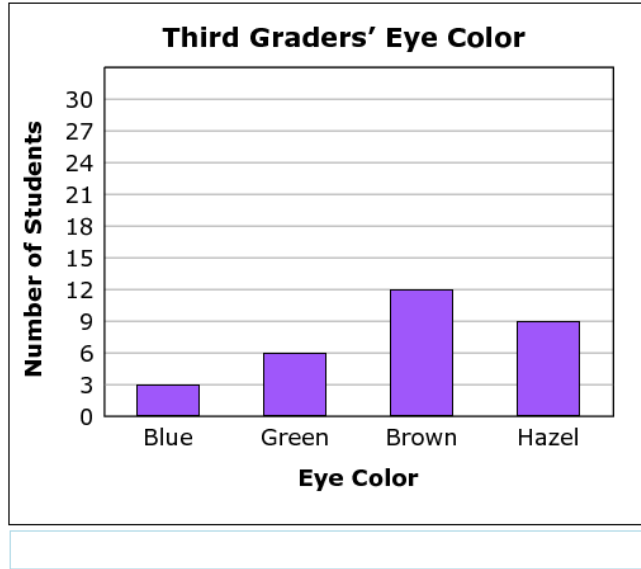


The table shows the eye color of third graders at Long Branch Elementary School.

**Eye Color of Third Graders**

Eye Color	Number of Students
Blue	3
Green	6
Brown	12
Hazel	9

Click above the labels in the bar graph to display the data from the table. Use a scale of 3.



Question 10  
Grade 3

10



Mike asked 32 students in his school about their favorite outdoor activities. Here are their replies:

- Two students like camping.
- At least 5 students like playing basketball.
- Twice as many students like hiking more than playing basketball.

Click on the table to create a pictograph that shows the students' replies.

Then drag a number to each box to complete the sentence.

0  
1  
2  
3  
4  
5  
6  
7  
8  
9

Delete

Basketball	<span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span>
Hiking	<span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span> <span style="color: red;">×</span>
Camping	<span style="color: red;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span> <span style="color: gray;">×</span>

× = 2 students

There are  more students that like going hiking than camping.

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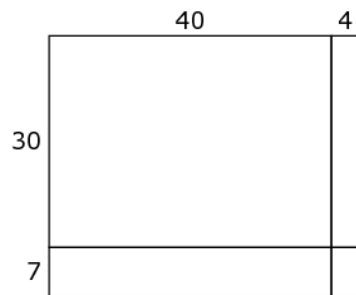
June 30, 2014

Question 11  
Grade 4

11



An area model is shown.



- Create a multiplication expression that you could use to find the area of this model.
- What is the total area, in square units, of the model?

Enter each answer on a separate line.

$$(40+4)(30+7)$$

1628

← → ↶ ↷ ✕

1	2	3	+	-	×	÷
4	5	6	<	=	>	
7	8	9	$\frac{\square}{\square}$	( )		
0	.					

**Other Correct Responses:**

- any equivalent expression
- The order of the responses may be reversed.

Question 12  
Grade 3

12



A pentagon is shown in the answer space.

- A. Select sections of the pentagon to shade an area that is greater than  $\frac{1}{2}$  and less than 1.
- B. What fraction of the pentagon is shaded? Drag a number into each box to show the shaded area.

0

1 **A. Shade an area greater than  $\frac{1}{2}$  and less than 1**

2

3

4

5

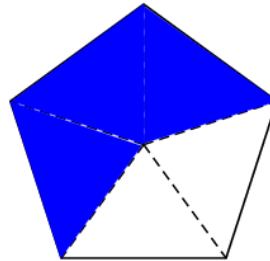
6

7

8

9

**B. Area shaded**



**Other Correct Responses:**

- 4 sections shaded and  $\frac{4}{5}$

**Question 13**  
**Grade 3**

**13**



Which is another way to represent 48?

- $4 \times (6 \times 2)$
- $4 \times (6 + 2)$
- $(2 \times 4) \times (6 + 8)$
- $40 \times 8$

*Option A is correct because it is equal to 48.*  
*Option B is incorrect because it is equal to 32.*  
*Option C is incorrect because it is equal to 112.*  
*Option D is incorrect because it is equal to 320.*

**Question 14**  
**Grade 3**

**14**



Consider the shapes described in the answer space.

- A. Click on the name in the first column that describes the shape you will draw.
- B. Use the Connect Line tool to draw your shape.

Delete Add Point Connect Line

<b>A.</b> My shape is: a square <b>a rectangle</b>	My shape is <b>not</b> : a rhombus
<b>B.</b>	

**Other Correct Responses:**

- any rectangle that is not a square

Question 15  
Grade 4

15



Maria's rectangular garden has a total area of 60 square feet.

She wants to plant vegetables in rows that are all the same size.

- A. Use the Connect Line tool to draw the border of Maria's garden.
- B. Use the Connect Line tool to show how she can divide her garden.
- C. Drag numbers to the boxes and a symbol to the circle to create an equation that models your drawing.

Delete
Add Point
Connect Line

**A. and B. Maria's Garden**

**C. Equation**

60

÷

3

=

20

**Other Correct Responses:**

- any drawing and equation (multiplication or division) that meet the conditions given



Question 16  
Grade 4

16



Consider the equation  $d \div 3 = 12$  remainder 2.

- What is the dividend,  $d$ ?
- What would the dividend,  $d$ , be if there was no remainder?

Enter each answer on a separate line.

38		
36		
←	→	↶
↷	↵	✖
1	2	3
4	5	6
7	8	9
0	.	

**Other Correct Responses:**

- *The order of the responses may be reversed.*

**Question 17**  
**Grade 4**

**17**



Describe what an equilateral triangle is.

Type your answer in the space provided.

An equilateral triangle is a triangle where all the sides are equal in length.

**Other Correct Responses:**

- *Response include the following characteristics: all three angles or all three sides are the same*

**Question 18**  
**Grade 4**

**18**



Use the Add Point tool to show two points in the grid space.

The points must be six units from each other.

The image shows a digital workspace for a math problem. At the top, there is a toolbar with two buttons: 'Delete' (with a red 'X' icon) and 'Add Point' (with a red dot and star icon). Below the toolbar is a large grid of 20 units by 20 units. Two red dots are placed on the grid, six units apart horizontally. Below the grid is a text input field.

**Other Correct Responses:**

- *one point placed anywhere in the grid space and the second point placed exactly 6 units away from it (note that points must be on a vertical line or on a horizontal line)*