FSA
ELA & Mathematics
Assessments

Grade 5

FSA Mathematics

Practice Test Questions

The purpose of these practice test materials is to orient teachers and students to the types of questions on paper-based FSA Mathematics tests. By using these materials, students will become familiar with the types of items and response formats they may see on a paper-based test. The practice questions and answers are not intended to demonstrate the length of the actual test, nor should student responses be used as an indicator of student performance on the actual test. The practice test is not intended to guide classroom instruction.

Directions for Answering the Mathematics Practice Test Questions

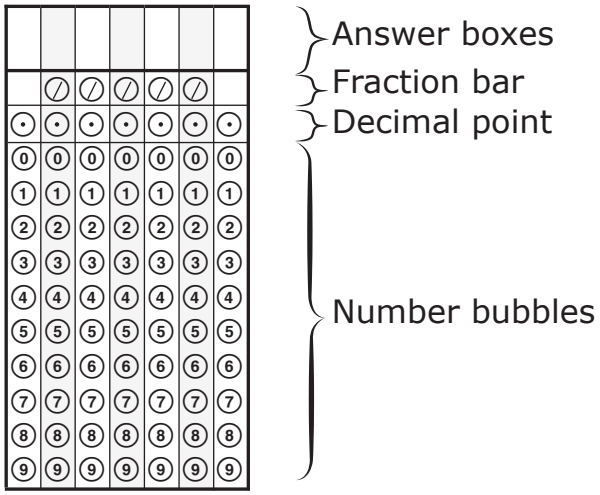
If you don't know how to work a problem, ask your teacher to explain it to you. Your teacher has the answers to the practice test questions.

You may need conversions to help you solve some of the problems. You may refer to the Reference Sheet on page 5 as often as you like.

Use the space in your Mathematics Practice Test Questions booklet to do your work.

Directions for Completing the Response Grids

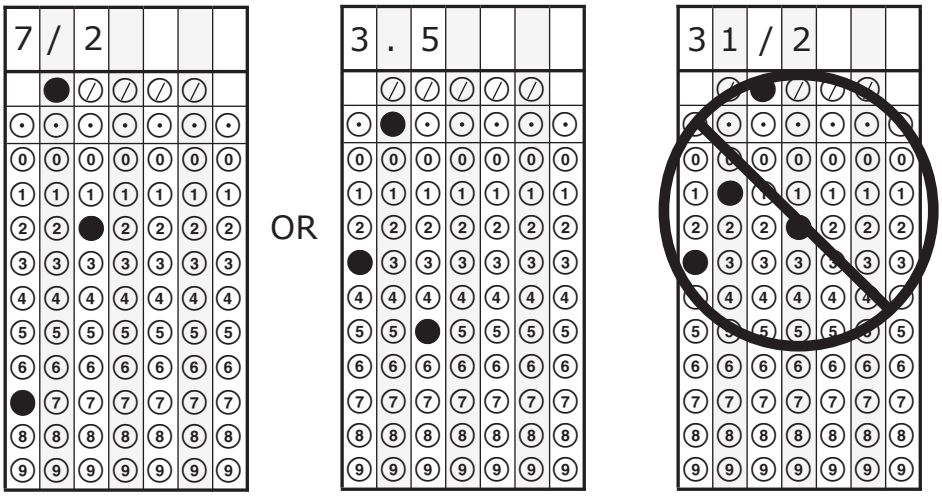
1. Work the problem and find an answer.
2. Write your answer in the answer boxes at the top of the grid.
    - Write your answer with the first digit in the left answer box OR with the last digit in the right answer box.
    - Write only one digit or symbol in each answer box. Do NOT leave a blank answer box in the middle of an answer.
    - Be sure to write a decimal point or fraction bar in the answer box if it is a part of the answer.
3. Fill in a bubble under each box in which you wrote your answer.
    - Fill in one and ONLY one bubble for each answer box. Do NOT fill in a bubble under an unused answer box.
    - Fill in each bubble by making a solid mark that completely fills the circle.
    - You MUST fill in the bubbles accurately to receive credit for your answer.



Do NOT write a mixed number, such as $3\frac{1}{2}$, in the answer boxes.

Change the mixed number to an equivalent fraction, such as $\frac{7}{2}$, or to an equivalent decimal, such as 3.5. Do not try to fill in $3\frac{1}{2}$, as it would be read as $\frac{31}{2}$ and would be counted wrong.

CORRECT **INCORRECT**



Grade 5 FSA Mathematics Reference Sheet

Customary Conversions

1 foot = 12 inches
1 yard = 3 feet
1 mile = 5,280 feet
1 mile = 1,760 yards

1 cup = 8 fluid ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts

1 pound = 16 ounces
1 ton = 2,000 pounds

Metric Conversions

1 meter = 100 centimeters
1 meter = 1000 millimeters
1 kilometer = 1000 meters

1 liter = 1000 milliliters

1 gram = 1000 milligrams
1 kilogram = 1000 grams

Time Conversions

1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours
1 year = 365 days
1 year = 52 weeks

Use the space in this booklet to do your work. For multiple-choice items, fill in one bubble for the correct answer. For matching items and multiselect items, fill in the bubbles for all of the correct answers. For items with response grids, refer to the Directions for Completing the Response Grids on pages 3 and 4. If you change your answer, be sure to erase completely. Calculators are NOT permitted for Session 1 of this practice test.

1. A multiplication expression with a product of 34,572 is shown.

$$\begin{array}{r} 402 \\ \times \quad \square 6 \\ \hline \end{array}$$

What is the missing digit?

Ⓐ 0

Ⓑ 1

Ⓒ 7

Ⓓ 8

Go On

2. What is the value of $8 \div \frac{1}{5}$?

Ⓐ $\frac{8}{5}$

Ⓑ $\frac{81}{5}$

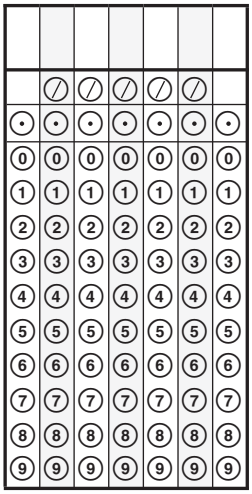
Ⓒ 13

Ⓓ 40

Go On

3. Michael is measuring fabric for the costumes of a school play. He needs 47 feet of fabric. He has $12\frac{1}{3}$ yards of fabric.

How many more **yards** of fabric does he need?



Go On

4. Which statements about the values 0.034 and 3.40 are true?

Ⓐ 0.034 is $\frac{1}{10}$ of 3.40.

Ⓑ 0.034 is $\frac{1}{100}$ of 3.40.

Ⓒ 0.034 is 10 times less than 3.40.

Ⓓ 0.034 is 100 times more than 3.40.

Ⓔ 3.40 is 100 times more than 0.034.

Go On

5. Kaiya and Deangelo each create a number pattern.

- Kaiya's pattern uses the rule "Add 2" and has a first term of 6.
- Deangelo's pattern uses the rule "Add 4" and has a first term of 5.

Complete the statement that describes the relationship between the two number patterns. For each box, fill in the bubble before the word or phrase that is correct.

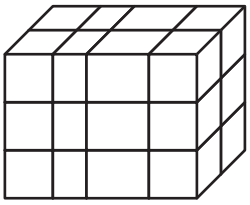
The two patterns [Ⓐ have / Ⓑ do not have] terms in common because

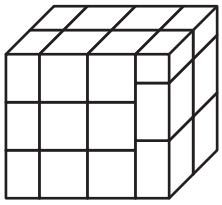
Kaiya's pattern has [Ⓐ only odd / Ⓑ only even / Ⓒ both odd and even] numbers and

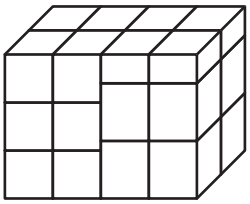
Deangelo's pattern has [Ⓐ only odd / Ⓑ only even / Ⓒ both odd and even] numbers.

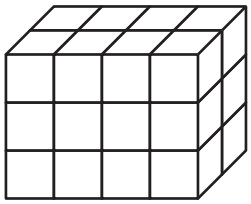
Go On

6. For which solid object can the volume be found only by counting the number of cubes?

Ⓐ 

Ⓒ 

Ⓑ 

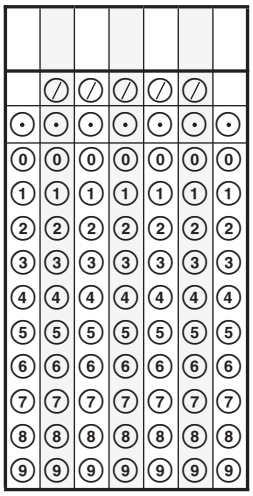
Ⓓ 

Go On

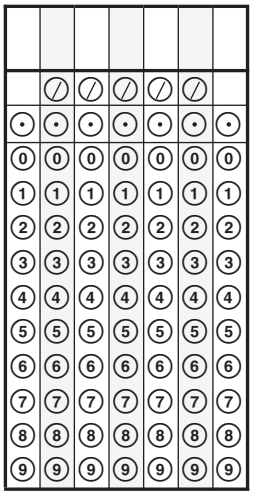
7. This question has **two** parts.

An unknown number is not equal to 3.6 but rounds to 3.6 when rounded to the nearest tenth.

Part A. What could be the unknown number?



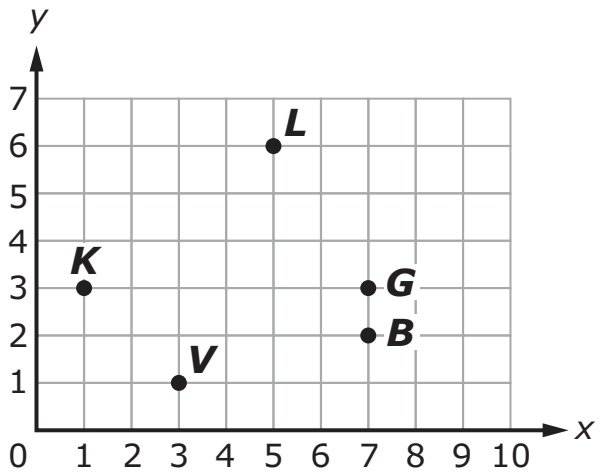
Part B. What does the unknown number round to when rounded to the nearest whole?



Go On

8. The Bailey family is visiting London, England. The points on the coordinate grid represent the locations of places they plan to visit.

Places In London



Key	
B	Buckingham Palace
G	Green Park
K	Kensington Palace
L	London Zoo
V	Victoria and Albert Museum

The Baileys are currently standing at a location exactly halfway between Kensington Palace and Green Park.

Which ordered pair describes the Baileys' location?

Ⓐ (2, 2)

Ⓑ (3, 4)

Ⓒ (4, 3)

Ⓓ (5, 3)

Go On

9. This question has **two** parts.

Part A. Which statement correctly describes the product when multiplying a whole number by a fraction less than 1?

Ⓐ The product will be less than the whole number because the fraction is less than 1.

Ⓑ The product will always be less than the whole number because multiplying by a fraction decreases the number.

Ⓒ The product will always be greater than the whole number because multiplying by a fraction increases the number.

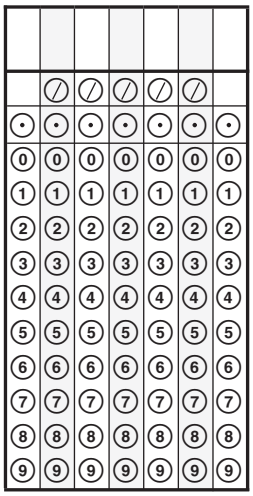
Ⓓ The product will be greater than the whole number because the numerator and the denominator are multiplied by the number.

Part B. Fill in the bubbles to match the value of each expression to the correct description.

	Less than 3,827	Equal to 3,827	Greater than 3,827
$3{,}827 \times \frac{5}{8}$	Ⓐ	Ⓑ	Ⓒ
$3{,}827 \times \frac{8}{3}$	Ⓓ	Ⓔ	Ⓕ
$3{,}827 \times \frac{8}{8}$	Ⓖ	Ⓗ	Ⓘ
$3{,}827 \times \frac{3}{5}$	Ⓙ	Ⓚ	Ⓛ

Go On

10. What is the value of the expression 6 × (4 + 3)?



11. Jasmine has $\frac{3}{4}$ cup of flour in a mixing bowl.

After adding more flour to the mixing bowl, Jasmine says that she now has $\frac{5}{8}$ cup of flour.

Which of the following explains why Jasmine's statement is incorrect?

Ⓐ 5 is not a multiple of 3.

Ⓑ 3 is less than 5.

Ⓒ $\frac{5}{8}$ is less than $\frac{3}{4}$.

Ⓓ $\frac{5}{8}$ is not a multiple of $\frac{3}{4}$.

Go On

Use the space in this booklet to do your work. For multiple-choice items, fill in one bubble for the correct answer. For matching items and multiselect items, fill in the bubbles for all of the correct answers. For items with response grids, refer to the Directions for Completing the Response Grids on pages 3 and 4. If you change your answer, be sure to erase completely. Calculators are NOT permitted for Session 2 of this practice test.

12. An expression is shown.

$$36 \div (4 + 2)$$

Which statement describes this expression?

Ⓐ 36 divided by 4, added to 2

Ⓑ the sum of 4 and 2 divided by 36

Ⓒ 36 divided by the sum of 4 and 2

Ⓓ the sum of 36 and 4 divided by 2

Go On

13. David multiplies and divides original numbers by powers of 10 to create new numbers.

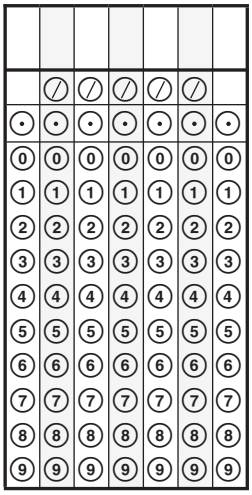
Fill in the bubbles to select the original numbers in the chart that were multiplied by 10^3 to create the new numbers.

Original Numbers	New Numbers
Ⓐ 523	523,000
Ⓑ 0.005	5
Ⓒ 100	0.001
Ⓓ 600	60,000
Ⓔ 4.56	4,560
Ⓕ 37.9	3,790

Go On

14. What is the missing value in the equation?

$$2\frac{3}{12} + \frac{3}{\square} = 2\frac{5}{8}$$



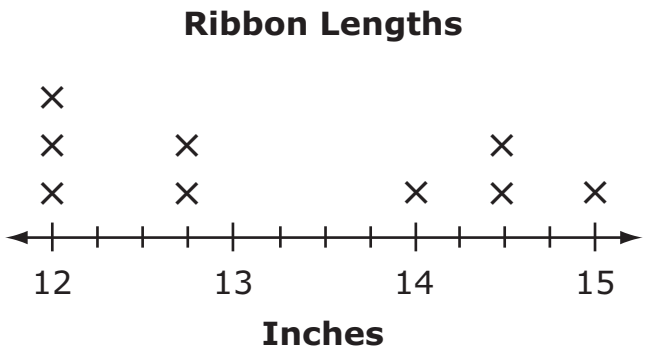
Go On

15. For each attribute, fill in the bubbles to select all the shapes that **always** have that attribute.

	Rectangle	Rhombus	Square	Parallelogram
4 equal-length sides	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4 right angles	Ⓔ	Ⓕ	Ⓖ	Ⓗ
Exactly one pair of parallel sides	Ⓘ	Ⓙ	Ⓚ	Ⓛ
Exactly two pairs of parallel sides	Ⓜ	Ⓝ	Ⓞ	Ⓟ

Go On

16. Kelly has nine pieces of ribbon. She recorded the length of each piece in the line plot shown.



What is the total length of the three longest pieces of ribbon?

Ⓐ 43 inches

Ⓑ $43\frac{1}{2}$ inches

Ⓒ 44 inches

Ⓓ $44\frac{1}{4}$ inches

Go On

17. Which expression could be used to find the quotient of 1,575 ÷ 21?

Ⓐ (1,000 ÷ 21) + (500 ÷ 21) + (70 ÷ 21) + (5 ÷ 21)

Ⓑ (1,500 ÷ 20) + (75 ÷ 1)

Ⓒ (1,575 ÷ 21) + (575 ÷ 21) + (75 ÷ 21) + (5 ÷ 21)

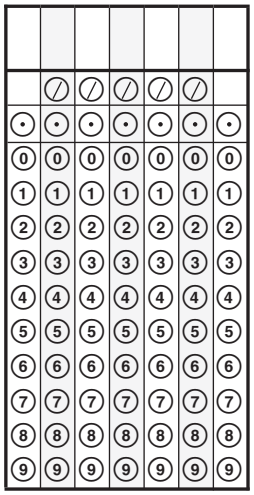
Ⓓ (1,575 ÷ 20) + (1,575 ÷ 1)

18. A right rectangular prism has a volume of 144 cubic centimeters and a height of 4 centimeters.

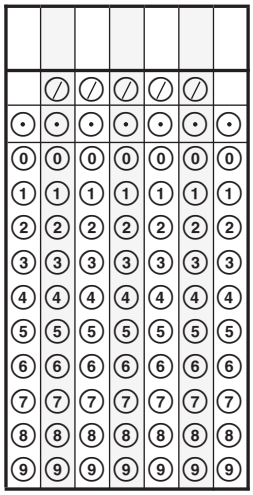
What are a possible length and width, in centimeters, of the prism?

$V = l \times w \times h$

Length =



Width =



Go On

19. The location of point *M* on the coordinate plane is (2, 7).

Select numbers to describe point *M* on the coordinate plane. For each box, fill in the bubble before the number that is correct.

Point *M* is

Ⓐ 0
Ⓑ 2
Ⓒ 5
Ⓓ 7
Ⓔ 9

units away from the origin in the direction of the *x*-axis.

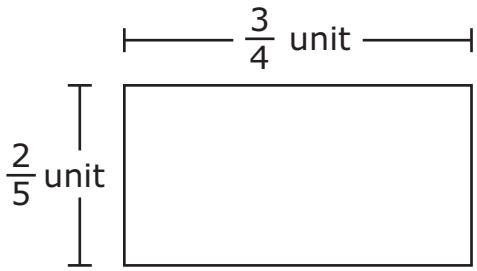
Point *M* is

Ⓐ 0
Ⓑ 2
Ⓒ 5
Ⓓ 7
Ⓔ 9

units away from the origin in the direction of the *y*-axis.

Go On

20. What is the area, in square units, of the rectangle?



Go On

21. Select all the statements that correctly compare the two numbers.

Ⓐ 1.309 > 1.315

Ⓑ 5.029 > 5.128

Ⓒ 7.25 > 7.255

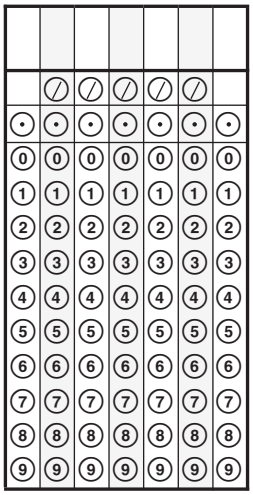
Ⓓ 2.001 < 2.10

Ⓔ 9.401 > 9.309

Go On

22. An art teacher gives a total of 35 pounds of clay to her students. She gives each of her 16 students the same amount of clay.

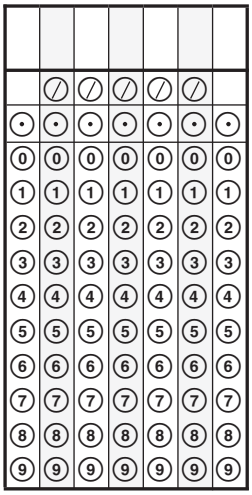
How many pounds of clay does each student get?



Go On

23. Allen ran 5.4 miles on Monday and 3.28 miles on Tuesday.

How many total miles did Allen run on both days?



Go On

FSA
ELA & Mathematics
Assessments

Grade 5
FSA Mathematics
Practice Test Answer Key

The Grade 5 FSA Mathematics Practice Test Answer Key provides the correct response(s) for each item on the practice test. The practice questions and answers are not intended to demonstrate the length of the actual test, nor should student responses be used as an indicator of student performance on the actual test.

1. A multiplication expression with a product of 34,572 is shown.

$$\begin{array}{r} 402 \\ \times \quad \square 6 \\ \hline \end{array}$$

What is the missing digit?

Ⓐ 0
Ⓑ 1
Ⓒ 7
● 8

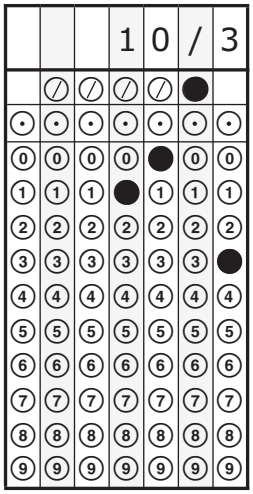
2. What is the value of $8 \div \frac{1}{5}$?

Ⓐ $\frac{8}{5}$
Ⓑ $\frac{81}{5}$
Ⓒ 13
● 40

Go On

3. Michael is measuring fabric for the costumes of a school play. He needs 47 feet of fabric. He has $12\frac{1}{3}$ yards of fabric.

How many more **yards** of fabric does he need?



4. Which statements about the values 0.034 and 3.40 are true?

Ⓐ 0.034 is $\frac{1}{10}$ of 3.40.

● 0.034 is $\frac{1}{100}$ of 3.40.

Ⓒ 0.034 is 10 times less than 3.40.

Ⓓ 0.034 is 100 times more than 3.40.

● 3.40 is 100 times more than 0.034.

Go On

5. Kaiya and Deangelo each create a number pattern.

- Kaiya's pattern uses the rule "Add 2" and has a first term of 6.
- Deangelo's pattern uses the rule "Add 4" and has a first term of 5.

Complete the statement that describes the relationship between the two number patterns. For each box, fill in the bubble before the word or phrase that is correct.

The two patterns
- Ⓐ have
- ● do not have

terms in common because

Kaiya's pattern has
- Ⓐ only odd
- ● only even
- Ⓒ both odd and even

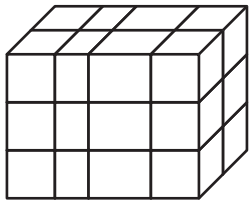
numbers and

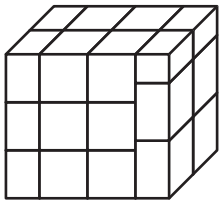
Deangelo's pattern has
- ● only odd
- Ⓑ only even
- Ⓒ both odd and even

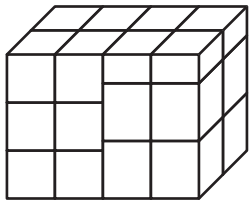
numbers.

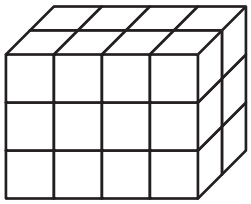
Go On

6. For which solid object can the volume be found only by counting the number of cubes?

Ⓐ 

Ⓒ 

Ⓑ 

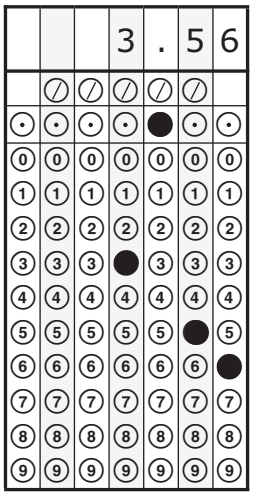
● 

Go On

7. This question has **two** parts.

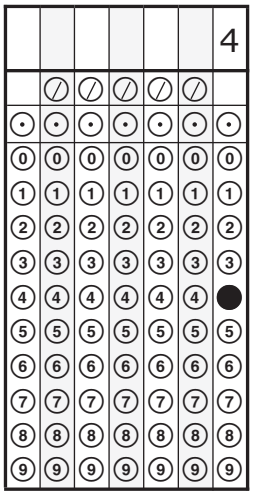
An unknown number is not equal to 3.6 but rounds to 3.6 when rounded to the nearest tenth.

Part A. What could be the unknown number?



Other correct responses: *3.56, or any value greater than or equal to 3.55 and less than 3.6, or any value greater than 3.6 and less than 3.65*

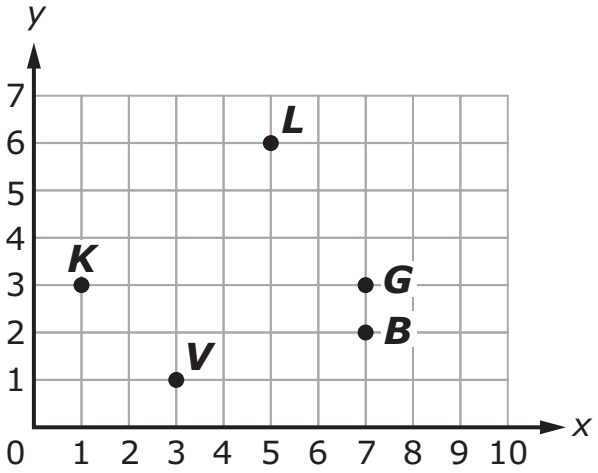
Part B. What does the unknown number round to when rounded to the nearest whole?



Go On

8. The Bailey family is visiting London, England. The points on the coordinate grid represent the locations of places they plan to visit.

Places In London



Key	
B	Buckingham Palace
G	Green Park
K	Kensington Palace
L	London Zoo
V	Victoria and Albert Museum

The Baileys are currently standing at a location exactly halfway between Kensington Palace and Green Park.

Which ordered pair describes the Baileys' location?

Ⓐ (2, 2)

Ⓑ (3, 4)

● (4, 3)

Ⓓ (5, 3)

Go On

9. This question has **two** parts.

Part A. Which statement correctly describes the product when multiplying a whole number by a fraction less than 1?

- ● The product will be less than the whole number because the fraction is less than 1.
- Ⓑ The product will always be less than the whole number because multiplying by a fraction decreases the number.
- Ⓒ The product will always be greater than the whole number because multiplying by a fraction increases the number.
- Ⓓ The product will be greater than the whole number because the numerator and the denominator are multiplied by the number.

Part B. Fill in the bubbles to match the value of each expression to the correct description.

	Less than 3,827	Equal to 3,827	Greater than 3,827
$3{,}827 \times \frac{5}{8}$	●	Ⓑ	Ⓒ
$3{,}827 \times \frac{8}{3}$	Ⓓ	Ⓔ	●
$3{,}827 \times \frac{8}{8}$	Ⓖ	●	Ⓘ
$3{,}827 \times \frac{3}{5}$	●	Ⓚ	Ⓛ

Go On

10. What is the value of the expression 6 × (4 + 3)?

					4	2
	⊘	⊘	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	●
3	3	3	3	3	3	3
4	4	4	4	4	●	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

11. Jasmine has $\frac{3}{4}$ cup of flour in a mixing bowl.

After adding more flour to the mixing bowl, Jasmine says that she now has $\frac{5}{8}$ cup of flour.

Which of the following explains why Jasmine's statement is incorrect?

Ⓐ 5 is not a multiple of 3.

Ⓑ 3 is less than 5.

● $\frac{5}{8}$ is less than $\frac{3}{4}$.

Ⓓ $\frac{5}{8}$ is not a multiple of $\frac{3}{4}$.

Go On

12. An expression is shown.

$$36 \div (4 + 2)$$

Which statement describes this expression?

Ⓐ 36 divided by 4, added to 2

Ⓑ the sum of 4 and 2 divided by 36

● 36 divided by the sum of 4 and 2

Ⓓ the sum of 36 and 4 divided by 2

Go On

13. David multiplies and divides original numbers by powers of 10 to create new numbers.

Fill in the bubbles to select the original numbers in the chart that were multiplied by 10^3 to create the new numbers.

Original Numbers	New Numbers
● 523	523,000
● 0.005	5
Ⓒ 100	0.001
Ⓓ 600	60,000
● 4.56	4,560
Ⓕ 37.9	3,790

Go On

14. What is the missing value in the equation?

$$2\frac{3}{12} + \frac{3}{\square} = 2\frac{5}{8}$$

						8
	⊘	⊘	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	●
9	9	9	9	9	9	9

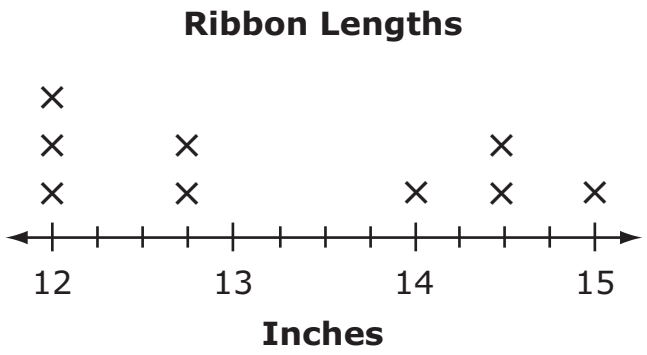
Go On

15. For each attribute, fill in the bubbles to select all the shapes that **always** have that attribute.

	Rectangle	Rhombus	Square	Parallelogram
4 equal-length sides	Ⓐ	●	●	Ⓓ
4 right angles	●	Ⓕ	●	Ⓗ
Exactly one pair of parallel sides	Ⓘ	Ⓙ	Ⓚ	Ⓛ
Exactly two pairs of parallel sides	●	●	●	●

Go On

16. Kelly has nine pieces of ribbon. She recorded the length of each piece in the line plot shown.



What is the total length of the three longest pieces of ribbon?

Ⓐ 43 inches

Ⓑ $43\frac{1}{2}$ inches

● 44 inches

Ⓓ $44\frac{1}{4}$ inches

Go On

17. Which expression could be used to find the quotient of 1,575 ÷ 21?

- ● (1,000 ÷ 21) + (500 ÷ 21) + (70 ÷ 21) + (5 ÷ 21)
- Ⓑ (1,500 ÷ 20) + (75 ÷ 1)
- Ⓒ (1,575 ÷ 21) + (575 ÷ 21) + (75 ÷ 21) + (5 ÷ 21)
- Ⓓ (1,575 ÷ 20) + (1,575 ÷ 1)

18. A right rectangular prism has a volume of 144 cubic centimeters and a height of 4 centimeters.

What are a possible length and width, in centimeters, of the prism?

$V = l \times w \times h$

Length =

					1	2
	⊘	⊘	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	0
1	1	1	1	1	●	1
2	2	2	2	2	2	●
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Width =

						3
	⊘	⊘	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	●
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Other correct responses: *any two values that have a product of 36*

19. The location of point *M* on the coordinate plane is (2, 7).

Select numbers to describe point *M* on the coordinate plane. For each box, fill in the bubble before the number that is correct.

Point *M* is

- Ⓐ 0
- ● 2
- Ⓒ 5
- Ⓓ 7
- Ⓔ 9

units away from the origin in the direction of the *x*-axis.

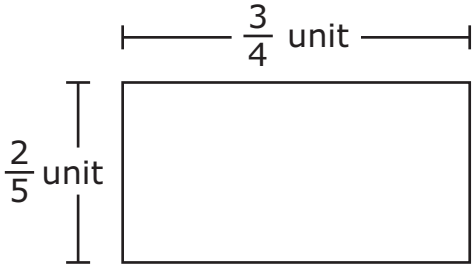
Point *M* is

- Ⓐ 0
- Ⓑ 2
- Ⓒ 5
- ● 7
- Ⓔ 9

units away from the origin in the direction of the *y*-axis.

Go On

20. What is the area, in square units, of the rectangle?



			6	/	2	0
	∅	∅	∅	●	∅	
⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	●
1	1	1	1	1	1	1
2	2	2	2	2	●	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	●	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Other correct responses: *any equivalent value*

Go On

21. Select all the statements that correctly compare the two numbers.

Ⓐ 1.309 > 1.315

Ⓑ 5.029 > 5.128

Ⓒ 7.25 > 7.255

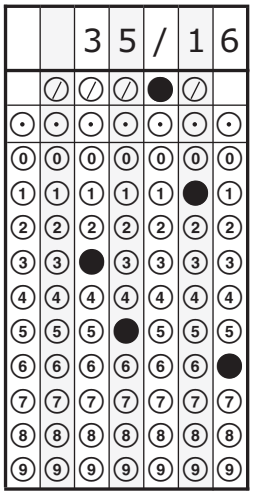
● 2.001 < 2.10

● 9.401 > 9.309

Go On

22. An art teacher gives a total of 35 pounds of clay to her students. She gives each of her 16 students the same amount of clay.

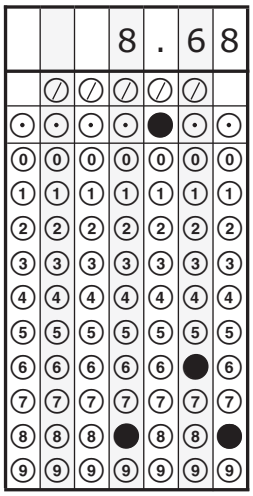
How many pounds of clay does each student get?



Go On

23. Allen ran 5.4 miles on Monday and 3.28 miles on Tuesday.

How many total miles did Allen run on both days?



Go On