



The purpose of these practice test materials is to orient teachers and students to the types of questions on paper-based FSA 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 formulas and 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.

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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, negative sign, 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.

⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖
	∕	∕	∕	∕	∕	∕	
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0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9

} Answer boxes
} Negative sign
} Fraction bar
} Decimal point
} Number bubbles

When a percent is required to answer a question, do NOT convert the percent to its decimal or fractional equivalent. Grid in the percent value without the % symbol. Do the same with dollar amounts.

-	1	1				
⊖	⊖	⊖	⊖	⊖	⊖	⊖
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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	8
9	9	9	9	9	9	9

		-	6	.	7	8
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⊙	⊙	⊙	⊙	●	⊙	⊙
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
7	7	7	7	7	●	7
8	8	8	8	8	8	●
9	9	9	9	9	9	9

2	5	.	3			
⊖	⊖	⊖	⊖	⊖	⊖	⊖
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1	1	1	1	1	1	1
●	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
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
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				1	3	6
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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	●
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Do NOT write a mixed number, such as $13\frac{1}{4}$, in the answer boxes.

Change the mixed number to an equivalent fraction, such as $\frac{53}{4}$, or to an

equivalent decimal, such as 13.25. Do not try to fill in $13\frac{1}{4}$, as it would be

read as $\frac{131}{4}$ and would be counted wrong.

CORRECT

INCORRECT

5	3	/	4			
⊖	⊖	⊖	⊖	⊖	⊖	⊖
/	●	/	/	/	/	/
⊙	⊙	⊙	⊙	⊙	⊙	⊙
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
●	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

OR

1	3	.	2	5		
⊖	⊖	⊖	⊖	⊖	⊖	⊖
/	/	/	/	/	/	/
⊙	⊙	●	⊙	⊙	⊙	⊙
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
4	4	4	4	4	4	4
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

1	3	1	/	4		
⊖	⊖	⊖	⊖	⊖	⊖	⊖
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⊙	⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0	0
●	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
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Grade 6 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

Formulas

$$A = bh$$

$$A = lw$$

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$V = Bh$$

$$V = lwh$$

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Session 1



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. Which expression is equivalent to $4(6x + 11)$?

- Ⓐ 68
- Ⓑ $68x$
- Ⓒ $24x + 11$
- Ⓓ $24x + 44$

2. Select the values of x that make each equation or inequality true.

	$x = 1$	$x = 2$	$x = 3$
$2x + 5 = 9$	Ⓐ	Ⓑ	Ⓒ
$2x + 5 < 9$	Ⓓ	Ⓔ	Ⓕ
$2x + 5 \leq 9$	Ⓖ	Ⓗ	Ⓘ

3. Chicago has a temperature of -10 degrees Fahrenheit ($^{\circ}\text{F}$). It is colder in Minneapolis than in Chicago.

Select all the values that could represent the temperature of Minneapolis.

- (A) 12°F
- (B) 8°F
- (C) -8°F
- (D) -12°F
- (E) -20°F

4. Dominic is buying candy by the pound for a party. For every 10 pounds of candy he buys, he pays \$12.

What is the cost, per pound, for the candy?

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

5. Which question can be answered using the expression $\frac{1}{3} \div \frac{3}{4}$?
- (A) Dan fills $\frac{1}{3}$ of a mold that holds $\frac{3}{4}$ pound of sand. How much sand did Dan use to fill the mold?
- (B) Dan fills $\frac{3}{4}$ of a mold that holds $\frac{1}{3}$ pound of sand. How much sand did Dan use to fill the mold?
- (C) How many $\frac{3}{4}$ -pound molds are in $\frac{1}{3}$ pound of sand?
- (D) How many $\frac{1}{3}$ -pound molds are in $\frac{3}{4}$ pound of sand?

6. An expression is shown.

$$1608 \div 268$$

What is the value of the expression?

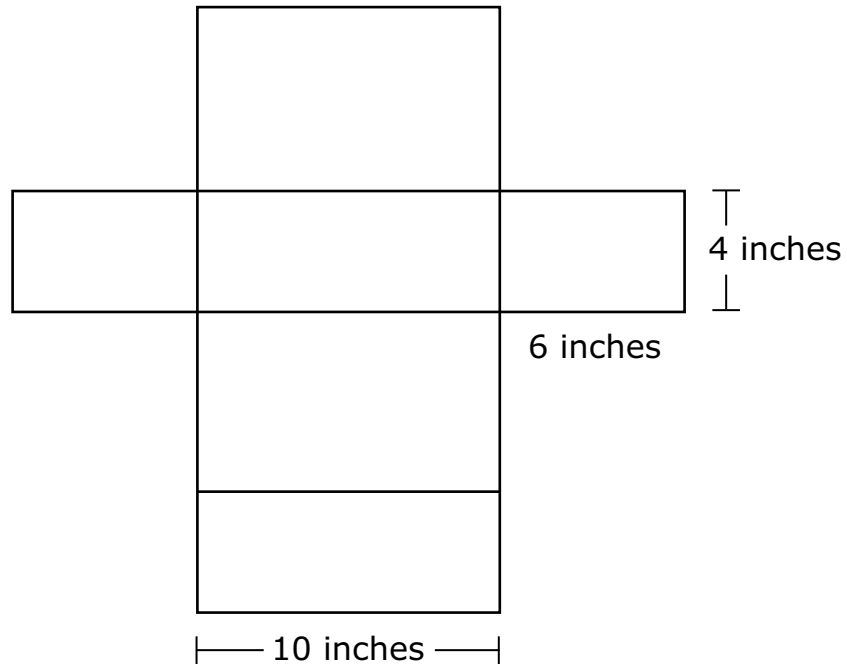
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2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
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6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9

7. Amir collected data from his sixth-grade class at Liberty Middle School.

Which question could Amir ask as a statistical question?

- (A) What time do classes start at Liberty Middle School?
- (B) What is your favorite subject?
- (C) How many students are in sixth grade at the start of this year?
- (D) How many subjects are there in sixth grade?

8. Carl is shipping a cardboard box that is a rectangular prism. The net of Carl's box is shown.



What is the area of cardboard, in square inches, required for Carl's box?

-	-	-	-	-	-	-
/	/	/	/	/	/	/
.
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	8
9	9	9	9	9	9	9

9. What is the value of $(5)^3$?

-	-	-	-	-	-	-
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.
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	8
9	9	9	9	9	9	9

10. Fill in the bubbles to match the equivalent expressions.

	$4(10+9)$	$9(5+2)$	$3(12+7)$
$36 + 21$	(A)	(B)	(C)
$45 + 18$	(D)	(E)	(F)
$40 + 36$	(G)	(H)	(I)



This is the end of Session 1.





Session 2

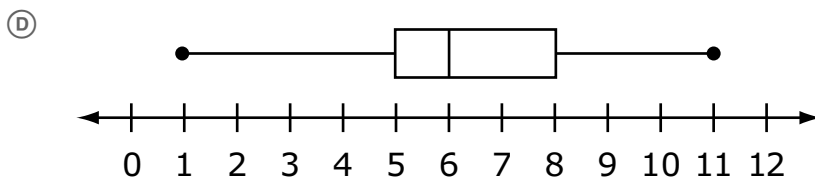
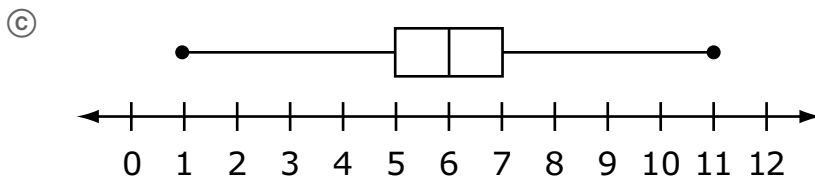
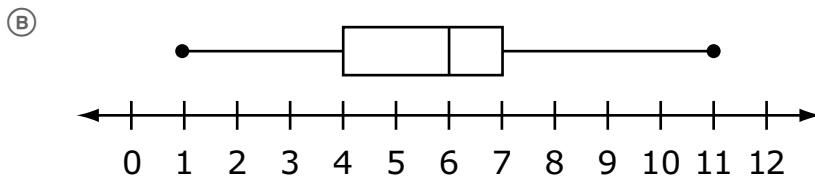
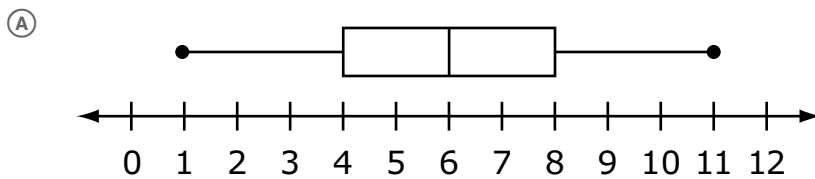


Use the space in this booklet to do your work. For multiple-choice items, fill in one bubble for the correct answer. For matching items and multiselect items, fill in the bubbles for all of the correct answers. For items with response grids, refer to the Directions for Completing the Response Grids on 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.

11. A class survey provides the data shown.

1, 4, 4, 5, 5, 5, 6, 6, 7, 7, 7, 8, 8, 9, 11

Which box plot represents the class?



12. Select all the statements that describe the expression $5 + 2x$.

- Ⓐ The expression represents 5 plus 2 plus x .
- Ⓑ The expression represents 5 plus 2 times x .
- Ⓒ The expression represents 5 plus x plus x .
- Ⓓ The expression represents 5 plus x times x .
- Ⓔ The expression represents the sum of 5 and $2x$.
- Ⓕ The expression represents the product of 5 and $2x$.

13. An expression is shown.

$$590.92 - 219.38$$

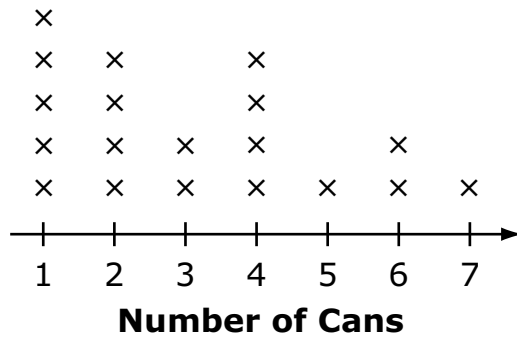
What is the value of the expression?

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

14. In a circle, which ratio is equivalent to π ?

- Ⓐ radius to area
- Ⓑ diameter to radius
- Ⓒ area to circumference
- Ⓓ circumference to diameter

15. A line plot shows the number of cans a class of students at Epping Middle School collected for a canned food drive.



How many students collected cans of food?

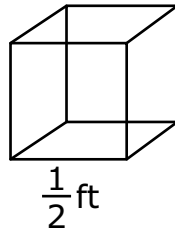
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1	1	1	1	1	1	1
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4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
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8	8	8	8	8	8	8
9	9	9	9	9	9	9

-
- 16.** Chicago, Illinois, has an elevation of 600 feet above sea level. The elevation of Desert Shores, California, is 800 feet less than the elevation of Chicago.

Select all options that apply to Desert Shores.

- Ⓐ elevation of -200 feet
- Ⓑ elevation of 200 feet
- Ⓒ below sea level
- Ⓓ at sea level
- Ⓔ above sea level

17. Alex has 64 cubes, with dimensions in feet (ft), like the one shown.



He uses all the cubes to fill a box shaped like a larger rectangular prism. There are no gaps between the cubes.

A. What is the volume, in cubic feet, of the larger rectangular prism?

Volume =

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

B. What is a possible set of dimensions, in feet, of the larger rectangular prism?

Length =

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

Width =

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

Height =

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

- 18.** Tim drives the Grand Avenue bus route. He records the total number of passengers each week for 4 weeks.

The mean and mean absolute deviation of the data are shown.

- Mean: 17,123
- Mean absolute deviation: 611

Select all the possible numbers of riders for week 5 that are within the mean absolute deviation.

- Ⓐ 16,297
- Ⓑ 16,809
- Ⓒ 17,724
- Ⓓ 17,956
- Ⓔ 18,013

19. The points $(4, -6)$ and $(9, -6)$ represent the location of two towns on a coordinate grid, where one unit is equal to one mile.

What is the distance, in miles, between the two towns?

-	-	-	-	-	-	-	-
/	/	/	/	/	/	/	/
.
0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
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This is the end of Session 2.



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Florida Department of Education, Tallahassee, Florida
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