

PRACTICE TEST

Mathematics

Grade 5

Student Name

School Name

District Name



Grade 5 Mathematics

SESSION 1

This session contains 6 questions.

*You may use your reference sheet during this session.
You may **not** use a calculator during this session.*



Directions

Read each question carefully and then answer it as well as you can. You must record all answers in your Practice Test Answer Document.

For some questions, you will mark your answers by filling in the circles in your Practice Test Answer Document. Make sure you darken the circles completely. Do not make any marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely.

For other questions, you will need to fill in an answer grid. Directions for completing questions with answer grids are provided on the next page.

If a question asks you to show or explain your work, you must do so to receive full credit. Write your response in the space provided in your Practice Test Answer Document. Only responses written within the provided space will be scored.

Directions for Completing Questions with Answer Grids

1. Work the question and find an answer.
2. Write your answer in the boxes at the top of the grid.
3. Print only one number or symbol in each box. Do not leave a blank box in the middle of an answer.
4. Under each box, fill in the circle that matches the number or symbol you wrote above. Make a solid mark that completely fills the circle.
5. Do not fill in a circle under an unused box.
6. If you need to change an answer, be sure to erase your first answer completely.
7. See below for examples on how to correctly complete an answer grid.

EXAMPLES

To answer 632 in a question, fill in the answer grid as shown below.

6	3	2			
○	○	○	○	○	○
0	0	0	0	0	0
1	1	1	1	1	1
2	2	●	2	2	2
3	●	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
●	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

A brick path has 10 rows of 4 bricks. What is the total number of bricks in the path?

Enter your answer in the box.

4	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
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

1 Which of the following expressions represents the number *one million*?

A. 10^8

B. 10^7

C. 10^6

D. 10^5

2 Compute:

$$(9 + 2) \times (8 - 5)$$

Enter your answer in the box.

3 Which expression is equal to $\frac{7}{8}$?

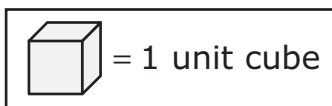
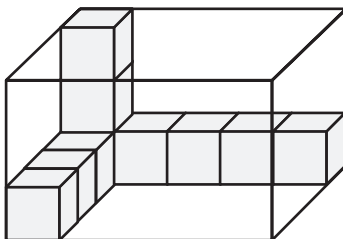
A. $8 - 7$

B. 7×8

C. $\frac{8}{7}$

D. $7 \div 8$

- 4 What is the volume of the rectangular prism in cubic units?



Enter your answer in the box.

- 5 Solve.

$$\frac{3}{4} + \frac{4}{5} - \frac{7}{10} =$$

- A. $\frac{7}{20}$
B. $\frac{14}{20}$
C. $\frac{17}{20}$
D. $\frac{21}{20}$

- 6 Terry is making meatballs for a family dinner. He needs ground turkey and ground beef to make the meatballs.

Ground turkey costs \$4.50 per pound. Terry buys 2.6 pounds of ground turkey.

Part A

What is the total cost, in dollars, for 2.6 pounds of ground turkey? Show or explain how you got your answer.

Enter your answer and your work or explanation in the space provided.

Part B

Terry needs 5.5 pounds of ground beef to make the meatballs. He has 2.75 pounds of ground beef at home.

What is the total number of pounds of ground beef that Terry needs to buy? Show or explain how you got your answer.

Enter your answer and your work or explanation in the space provided.

Part C

Terry has a total of 8.1 pounds of meat to make meatballs. He will use 0.3 pound of meat to make each meatball.

What is the total number of 0.3-pound meatballs Terry can make with 8.1 pounds of meat? Show or explain how you got your answer.

Enter your answer and your work or explanation in the space provided.

Grade 5 Mathematics

SESSION 2

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○	○	○	○	○	○
0	●	0	0	0	0
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●	4	4	4	4	4
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

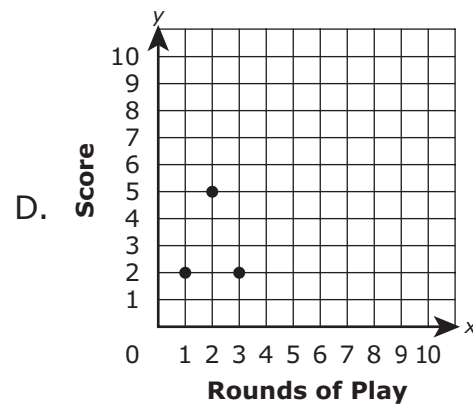
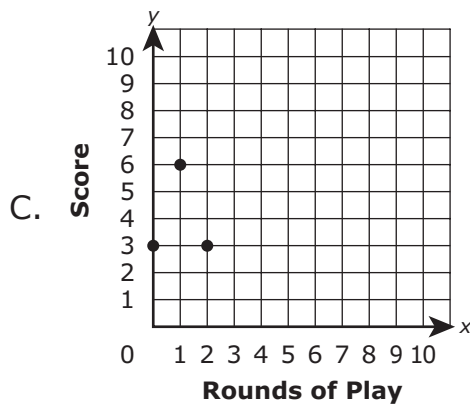
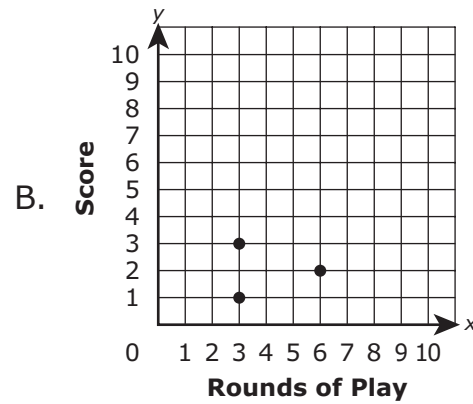
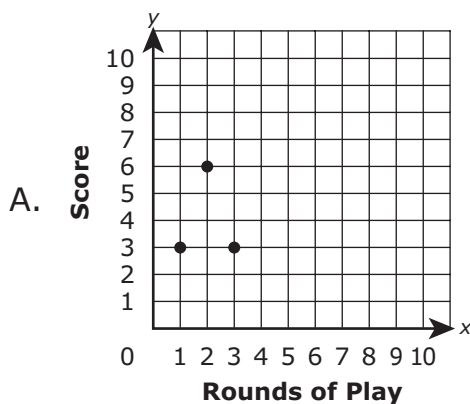
- 7 Julie uses 4 green beads and 6 blue beads in each bracelet she makes. What is the total number of green beads Julie will use when she uses 24 blue beads?
- A. 6
 - B. 10
 - C. 12
 - D. 16

8 Mia is playing several rounds of a word game. Each coordinate pair shows the number of a round and Mia’s score for that round. She is keeping track of these coordinate pairs on a coordinate plane.

- Round 1: (1, 3)
- Round 2: (2, 6)
- Round 3: (3, 3)

Part A

Which coordinate plane correctly shows Mia’s scores for the first three rounds of play?



Part B

In round 4, Mia scores the same number of points as in rounds 2 and 3 combined.

What is the coordinate pair that represents Mia's score for round 4?

- A. (4, 5)
- B. (9, 4)
- C. (5, 4)
- D. (4, 9)

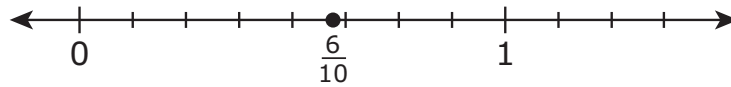
- 9 A box is in the shape of a right rectangular prism. The base of the box has an area of 15 square inches. The height of the box is 12 inches.

What is the volume, in cubic inches, of the box?

Enter your answer in the box.

- 10 Which expression matches the statement, “the sum of 2 and 4 subtracted from 9”?
- A. $2 + 9 - 4$
 - B. $9 - 2 + 4$
 - C. $9 - (2 + 4)$
 - D. $(2 + 4) - 9$
- 11 Which **two** conversions are correct?
- A. $7 \text{ mm} = 70 \text{ cm}$
 - B. $7 \text{ cm} = 0.07 \text{ m}$
 - C. $7,000 \text{ m} = 7 \text{ km}$
 - D. $0.7 \text{ cm} = 70 \text{ mm}$
 - E. $7 \text{ m} = 7,000 \text{ km}$

- 12 On Saturday, Craig rode his bike $\frac{5}{8}$ of a mile. On Sunday, he rode his bike $\frac{1}{2}$ of a mile. Craig added $\frac{5}{8}$ and $\frac{1}{2}$ to find the total distance, in miles, he rode his bike on the two days. Craig said $\frac{5}{8} + \frac{1}{2} = \frac{6}{10}$ and plotted $\frac{6}{10}$ on this number line.



- Explain why Craig's answer is not reasonable.
- Find the total distance, in miles, Craig rode on his bike on Saturday and Sunday.
- Explain how to use the number line to show your answer is correct.

Enter your answer and explanations in the space provided.

MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM

Grade 5 Mathematics Practice Test Answer Document

School Name: _____

District Name: _____

Last Name of Student: _____

First Name of Student: _____

MARKING INSTRUCTIONS

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt-tip pens.
- Make solid marks that fill the circles completely.
- Erase cleanly any marks you wish to change.
- Do not make any stray marks on this form.
- Do not fold, tear, or damage this form.

1. (A) (B) (C) (D)

2.

•	•	•	•	•	•
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
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

3. (A) (B) (C) (D)

4.

•	•	•	•	•	•
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
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

5. (A) (B) (C) (D)

6. Part A

6. Part B

6. Part C



7. (A) (B) (C) (D)

8. Part A (A) (B) (C) (D)

Part B (A) (B) (C) (D)

9.

•	•	•	•	•	•
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
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

10. (A) (B) (C) (D)

11. (A) (B) (C) (D) (E)

12.

