Student Name _____

P

MCAP Maryland Comprehensive Assessment Program

Grade Band 6/7 Mathematics Test Booklet

Practice Test

TEST BOOKLET SECURITY BARCODE

Unit 1
(Non-Calculator)

Directions:

Today, you will take Unit 1 of the Grade Band 6/7 Mathematics Practice Test. You will not be able to use a calculator.

Read each question. Then, follow the directions to answer each question. Mark your answers by completely filling in the circles in your answer document. Do not make any pencil marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely. If a question asks you to show or explain your work, you must do so to receive full credit. Only responses written within the provided space will be scored.

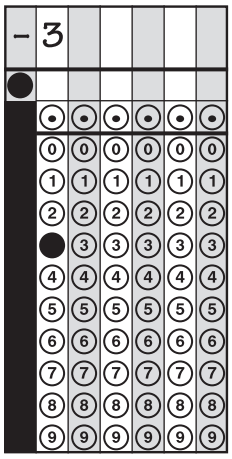
If you do not know the answer to a question, you may go on to the next question. If you finish early, you may review your answers and any questions you did not answer in this unit ONLY. Do not go past the stop sign.

Directions for Completing the Answer Grids

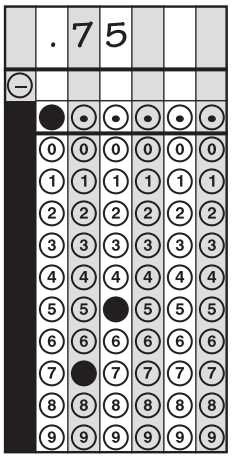
1. Work the problem and find an answer.
2. Write your answer in the boxes at the top of the grid.
3. Print only one number or symbol in each box. Do not leave a blank box in the middle of an answer.
4. Under each box, fill in the circle that matches the number or symbol you wrote above. Make a solid mark that completely fills the circle.
5. Do not fill in a circle under an unused box.
6. Fractions cannot be entered into an answer grid and will not be scored. Enter fractions as decimals.
7. See below for examples on how to correctly complete an answer grid.

EXAMPLES

To answer −3 in a question, fill in the answer grid as shown below.



To answer .75 in a question, fill in the answer grid as shown below.



1 A jar contains some marbles that are either white or red. The ratio of the number of white marbles to the number of red marbles is 2 : 3.

What might be the total amount of white and red marbles in the jar?

Select **all** that apply.

A 6 white marbles and 9 red marbles

B 12 white marbles and 13 red marbles

C 14 white marbles and 21 red marbles

D 22 white marbles and 33 red marbles

E 36 white marbles and 39 red marbles

2 What is the value of the following expression?

$$\left(-\frac{1}{2}\right) \div \left(\frac{3}{5}\right)$$

Select one answer.

A $\frac{1}{30}$

B $-\frac{1}{30}$

C $\frac{5}{6}$

D $-\frac{5}{6}$

3 Describe how the numbers $-7\frac{1}{2}$ and -7 would be positioned relative to each other on a horizontal number line.

Select one answer.

A The number $-7\frac{1}{2}$ would be positioned to the left of -7 on a horizontal number line because $-7\frac{1}{2} < -7$.

B The number $-7\frac{1}{2}$ would be positioned to the left of -7 on a horizontal number line because $-7\frac{1}{2} > -7$.

C The number $-7\frac{1}{2}$ would be positioned to the right of -7 on a horizontal number line because $-7\frac{1}{2} < -7$.

D The number $-7\frac{1}{2}$ would be positioned to the right of -7 on a horizontal number line because $-7\frac{1}{2} > -7$.

4 Melvin and Roberto played football on two different teams last season.

- Melvin's team won w games.
- Roberto's team won 3 fewer games than Melvin's team.

Which expression can be used to represent the number of games Roberto's team won last season?

Select one answer.

A $w + 3$

B $w - 3$

C $w \cdot 3$

D $w \div 3$

5 Which statements are true?

Select **all** that apply.

A $6\frac{3}{4} \div 9 \div 10$ is equivalent to $6\frac{3}{4} \div \frac{9}{10}$.

B $6\frac{3}{4} \div 9 \div 10$ is not equivalent to $6\frac{3}{4} \div \frac{9}{10}$.

C $\frac{24+3}{4} \cdot \frac{10}{9}$ is equivalent to $6\frac{3}{4} \div \frac{9}{10}$.

D $\frac{24+3}{4} \cdot \frac{10}{9}$ is not equivalent to $6\frac{3}{4} \div \frac{9}{10}$.

E $6\frac{3}{4} \div 9 \div 10$ is equivalent to $\frac{24+3}{4} \cdot \frac{10}{9}$.

F $6\frac{3}{4} \div 9 \div 10$ is not equivalent to $\frac{24+3}{4} \cdot \frac{10}{9}$.

STOP

You have come to the end of Unit 1 of the test. Review your answers from Unit 1 only.

GO ON TO NEXT PAGE

Unit 2
(Calculator)

Directions:

Today, you will take Unit 2 of the Grade Band 6/7 Mathematics Practice Test. You will be able to use a calculator.

Read each question. Then, follow the directions to answer each question. Mark your answers by completely filling in the circles in your answer document. Do not make any pencil marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely. If a question asks you to show or explain your work, you must do so to receive full credit. Only responses written within the provided space will be scored.

If you do not know the answer to a question, you may go on to the next question. If you finish early, you may review your answers and any questions you did not answer in this unit ONLY. Do not go past the stop sign.

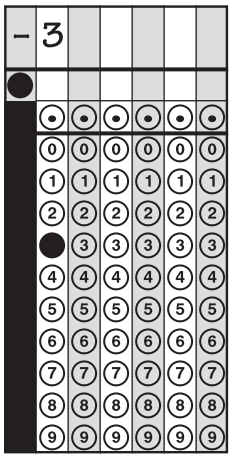
GO ON ▶

Directions for Completing the Answer Grids

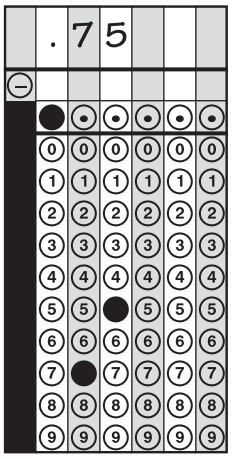
1. Work the problem and find an answer.
2. Write your answer in the boxes at the top of the grid.
3. Print only one number or symbol in each box. Do not leave a blank box in the middle of an answer.
4. Under each box, fill in the circle that matches the number or symbol you wrote above. Make a solid mark that completely fills the circle.
5. Do not fill in a circle under an unused box.
6. Fractions cannot be entered into an answer grid and will not be scored. Enter fractions as decimals.
7. See below for examples on how to correctly complete an answer grid.

EXAMPLES

To answer −3 in a question, fill in the answer grid as shown below.



To answer .75 in a question, fill in the answer grid as shown below.



1 Yvonne's age, in years, is represented by y. Rebekah's age is one year less than three times Yvonne's age.

Which expression represents Rebekah's age, in years?

Select one answer.

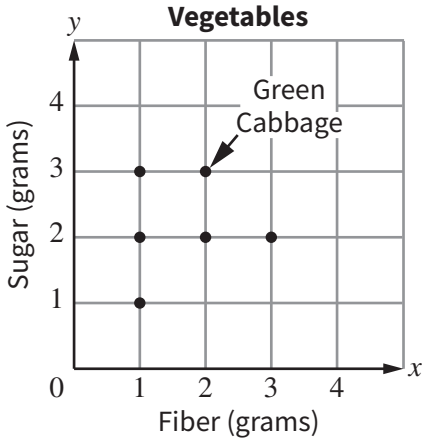
A $3y - 1$

B $1 - 3y$

C $3(y - 1)$

D $3(1 - y)$

2 The following graph shows the amount of fiber and sugar in one serving of each of six vegetables. One point represents green cabbage.



Based on the graph, which statement is true about one serving of green cabbage?

Select one answer.

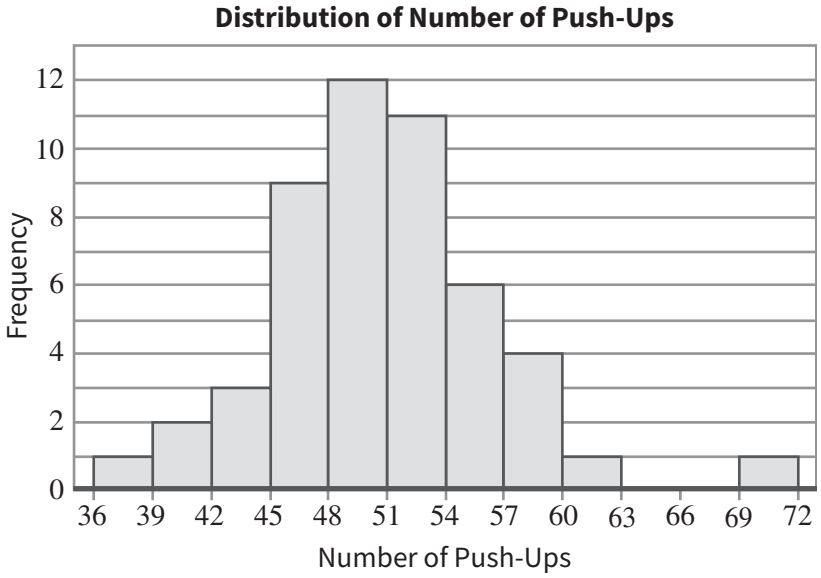
A It contains 2 grams of fiber and 3 grams of sugar.

B It contains 3 grams of fiber and 2 grams of sugar.

C It contains 3 grams of fiber and 4 grams of sugar.

D It contains 4 grams of fiber and 3 grams of sugar.

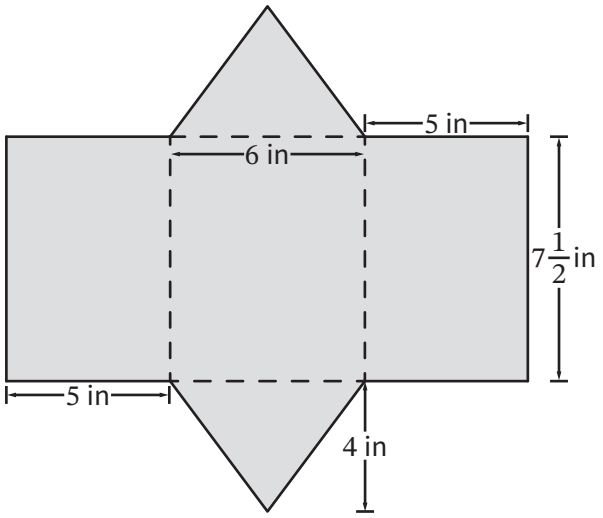
3 The following histogram summarizes the recorded number of push-ups that a group of fitness instructors completed in a certain time period. Each interval contains possible values at the left endpoint up to but not including the right endpoint.



What is the total number of fitness instructors represented in the histogram who completed 57 or more push-ups?

Enter your answer in the space provided.

4 A net for a triangular prism is shown in the following figure. Several measurements, in inches, also are shown in the figure. The prism has two triangular faces and three rectangular faces.



Part A

Jacob claims that it is impossible to determine the surface area of the triangular prism with the information provided about the net. Is Jacob's claim valid?

- If the claim is valid, explain your reasoning and list the information that is needed to find the surface area.
- If the claim is **not** valid, explain your reasoning and compute the surface area. Show your work.

Enter your reasoning, answer, and work (if the claim is **not** valid) in the space provided.

Part B

Sophia claims that if she doubles the lengths of each of the $7\frac{1}{2}$-inch edges of the prism, then she doubles the surface area of the prism. Is Sophia's claim valid? Explain your reasoning and determine the number of square inches by which the surface area will increase after she doubles the lengths of each of the $7\frac{1}{2}$-inch edges of the prism. Show your work.

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

STOP

You have come to the end of Unit 2 of the test. Review your answers from Unit 2 only.

P

6/7-MATH

1124239 1 2 3 4 5 A B C D E Printed in the USA ISD33355