## Student Name

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School Name $\qquad$
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Grade 5
Mathematics
Performance Based Assessment Practice Test

## School Use Only


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## Unit 1

## Directions:

Today, you will be taking Unit 1 of the Grade 5 Mathematics Practice Test.
Read each question carefully. Some questions will ask you to choose one correct answer, while others will ask you to choose more than one correct answer. Mark your answers by filling in the circles in your Test Booklet for the answers you choose.
If a question asks you to show or explain your work, you must do so to receive full credit. Be sure to:

- Write your response in the box provided in your Test Booklet.
- Label each part of your work if a question has multiple parts, and clearly identify your answer for each part.
- Respond in the box provided. Crossed-out work, writing that falls outside of the box, or work on scratch paper will not be scored.
Do not make any stray marks on the Test Booklet. If you need to change an answer, be sure to erase your first answer completely.
If you do not know the answer to a question, skip it and go on. If you finish Unit 1 of the test early, you may review your answers and any questions you may have skipped.


## 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.

- Print your answer starting with the first digit in the left box.
- Print only one digit or symbol in each box. You may not need all the boxes to enter an answer, but do not leave a blank box in the middle of an answer.

3. Under each box in which you wrote your answer, fill in the bubble that matches the number or symbol you wrote above.

- Fill in one and ONLY one bubble for each box. Do not fill in a bubble under an unused box.
- Fill in each bubble by making a solid mark that completely fills the circle.
- Fractions cannot be entered into an answer grid and will not be scored. Enter fractions as decimals.
- 4. See below for examples on how to correctly complete an answer grid.

To answer 632 in a question, fill in the answer grid as follows:


To answer . 75 in a question, fill in the answer grid as follows:


1. What is the volume of the rectangular prism in cubic units?


Enter your answer in the box.


GO ON
2. Which of these are equal to 83.041 ?

Select the two correct answers.
(A) eighty-three and forty-one tenths
(B) $8 \times 10+3 \times 1+4 \times \frac{1}{10}+1 \times \frac{1}{100}$
(c) eighty-three and forty-one hundredths
(D) $8 \times 10+3 \times 1+4 \times \frac{1}{100}+1 \times \frac{1}{1,000}$
(E) eighty-three and forty-one thousandths
3. Select the two comparisons that are correct.
(A) thirty-eight tenths $>3.78$
(B) five and sixty-nine thousandths $<5.69$
(c) $6 \times 10+25 \times \frac{1}{100}+8 \times \frac{1}{1,000}>60.342$
(D) $4.802>4+7 \times \frac{1}{10}+13 \times \frac{1}{100}+2 \times \frac{1}{1,000}$
(®) $3 \times 10+5 \times \frac{1}{10}+12 \times \frac{1}{1,000}<$ thirty and five hundred nine thousandths

Use the information provided to answer Part A and Part B for question 4.

Diana works at a clothing store. She sold $\frac{1}{5}$ of the total number of green shirts on Monday and $\frac{3}{12}$ of the total number of green shirts on Tuesday.

## 4. Part A

What fraction of green shirts did Diana sell on Monday and Tuesday?
(A) $\frac{8}{13}$
(B) $\frac{4}{17}$
(C) $\frac{5}{36}$
(D) $\frac{27}{60}$

## Part B

Diana sold $\frac{2}{15}$ of the total number of green shirts on Wednesday. What is the difference in the fraction of the total number of green shirts that were sold on Tuesday and Wednesday?
(A) $\frac{7}{60}$
(B) $\frac{5}{27}$
(c) $\frac{1}{3}$
() $\frac{1}{12}$

Use the information provided to answer Part A and Part B for question 5.

For a family gathering, Brittany made 5 meat loaves using 9 pounds of ground beef. She also made 14 hamburgers using 4 pounds of ground beef.

## 5. Part A

Each meat loaf was made with the same amount of ground beef. Which of these is closest to the amount of ground beef in each meat loaf?
(4) $\frac{1}{2}$ pound
(B) 1 pound
© $1 \frac{1}{2}$ pounds
(D) 2 pounds

## Part B

Each hamburger was made with the same amount of ground beef.
Which of these is closest to the amount of ground beef in each hamburger?
(4) $\frac{1}{2}$ pound
(B) $\frac{1}{4}$ pound
(c) $\frac{3}{4}$ pound
(0) 1 pound
6. An expression is shown.

$$
\frac{5}{6}+\frac{3}{12}
$$

Which expressions have like denominators that could be used as a next step to add the two fractions?

Select the two correct answers.
(A) $\frac{5}{6}+\frac{1}{4}$
(B) $\frac{5}{6}+\frac{3}{6}$
(c) $\frac{10}{12}+\frac{3}{12}$
(D) $\frac{5}{12}+\frac{6}{12}$
(E) $\frac{5}{12}+\frac{6}{24}$
(F) $\frac{20}{24}+\frac{6}{24}$
7. An egg farm packages 264 total cartons of eggs each month. The farm has 3 different sizes of cartons.

- The small carton holds 8 eggs, and $\frac{1}{6}$ of the total cartons are small.
- The medium carton holds 12 eggs, and $\frac{2}{3}$ of the total cartons are medium.
- The large carton holds 18 eggs, and the rest of the total cartons are large.

Determine how many of each size of carton is needed each month. Then determine how many eggs are needed to fill the 264 cartons. Show your work or explain your answers.

Enter your answers and your work or explanations in the space provided.

Use the information provided to answer Part A and Part B for question 8.

Nick measured two crickets in science class. The lengths of the two crickets are shown.

- Cricket A: $\frac{3}{8}$ inch
- Cricket B: $\frac{5}{8}$ inch

The science teacher asked Nick to compare the length of each cricket to $\frac{1}{2}$ inch.

## 8. Part A

Nick claims that the length of each cricket is greater than $\frac{1}{2}$ because the numerator of each cricket length is greater than the numerator in $\frac{1}{2}$.

Compare $\frac{1}{2}$ inch to the length of each cricket using the $>,<$, or $=$ symbol. Then explain whether Nick's reasoning is correct.

Enter your comparisons and your explanation in the space provided.

## Part B

Nick recorded the distance each cricket jumped.

- Distance for cricket A: $1 \frac{3}{4}$ feet
- Distance for cricket B: $3 \frac{2}{4}$ feet

Nick claims that cricket B jumped $2 \frac{1}{4}$ feet farther than cricket A because the difference between the whole numbers is 2 and the difference between the numerators is 1 .

- Explain why Nick's reasoning is incorrect.
- What is the correct difference, in feet, between the distance cricket A jumped and the distance cricket B jumped?

Enter your explanation and your answer in the space provided.
9. 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.
10. Which statement describes $\frac{3}{8} \times \frac{4}{9}$ ?
(A) $\frac{3}{8} \times \frac{4}{9}$ is 3 groups of $\frac{4}{9}$, divided into 8 equal parts.
(B) $\frac{3}{8} \times \frac{4}{9}$ is 8 groups of $\frac{4}{9}$, divided into 3 equal parts.
(c) $\frac{3}{8} \times \frac{4}{9}$ is 3 groups of $\frac{4}{9}$, divided into 72 equal parts.
(D) $\frac{3}{8} \times \frac{4}{9}$ is 8 groups of $\frac{4}{9}$, divided into 12 equal parts.
11. Which expression is equal to $\frac{7}{8}$ ?
(A) $8-7$
(B) $7 \times 8$
(c) $\frac{8}{7}$
(D) $7 \div 8$

## 12. Part A

Select the two equations that are correct when the number 20 is entered in the box.
(4) $\square \times 85=1,700$
(8) $\square \div 4=50$
(c) $1,500 \div \square=75$
(D) $120 \times 6=\square$
(©) $\square \times 50=100$

## Part B

Select the two equations that are correct when the number 200 is entered in the box.
(A) $\square \times 85=17,000$
(8) $\square \div 40=50$
(C) $15,000 \div \square=75$
(2) $1,200 \times 6=\square$
(®) $\square \times 50=1,000$
13. In this right rectangular prism, each small cube measures 1 unit on each side.


- What is the volume of the prism?
- Explain how you found the volume. You may show your work in your explanation.
- What would be the dimensions of a new right rectangular prism that has 20 fewer unit cubes than the original prism?
- Explain how you determined the dimensions of the new right rectangular prism.

Enter your answers and your explanations in the space provided.

## Use the information provided to answer Part A through Part C for question 14.

Shannon is building a rectangular garden that is 18 feet wide and 27 feet long.
14. Part A

Write an equation that represents the area of Shannon's garden. In your equation, let $g$ represent the area of Shannon's garden. Then solve your equation.

Enter your equation and your solution in the space provided.

## Part B

Shannon is putting a fence around the garden, except where there is a gate that is 3 feet wide.

One foot of the fence costs $\$ 43$. The cost of the gate is $\$ 128$.
Write an expression that represents the total cost of the fence and the gate.

Explain how you determined your expression.
Enter your expression and your explanation in the space provided.

## Part C

Use your expression from Part B to find the total cost, in dollars, of the fence and the gate.

Enter your answer in the space provided.
15. A teacher drew an area model to find the value of $6,986 \div 8$.

Teacher's Model for 6,986 $\div 8$


- Determine the number that each letter in the model represents and explain each of your answers.
- Write the quotient and remainder for $6,986 \div 8$.
- Explain how to use multiplication to check that the quotient is correct. You may show your work in your explanation.

Enter your answers and your explanations in the space provided.
16. Greg is volunteering at a track meet. He is in charge of providing the bottled water. Greg knows these facts:

- The track meet will last 3 days.
- There will be 117 athletes, 7 coaches, and 4 judges attending the track meet.
- One case of bottled water contains 24 bottles.

The table shows the number of bottles of water each athlete, coach, and judge will get for each day of the track meet.

Bottled Water for Track Meet

| Person Attending | Number of Bottles |
| :--- | :---: |
| Athlete | 4 |
| Coach | 3 |
| Judge | 2 |

What is the fewest number of cases of bottled water Greg will need to provide for all the athletes, coaches, and judges at the track meet? Show your work or explain how you found your answer using equations.

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


You have come to the end of the test.

- Review your answers.
- Then, close your test booklet and raise your hand to turn in your test materials.


