Grade 5 Mathematics Test Booklet

Practice Test

Unit 1

Directions:

Today, you will take Unit 1 of the Grade 5 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 circling your answer in your test booklet or writing your response in the space provided.

If you need to change an answer, be sure to erase your first answer completely. If aquestion asks you to show or explain your work, you must do so to receive full credit.

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.

1. Which statement about the corresponding terms in both Pattern A and Pattern B is always true?

Pattern A: 0, 5, 10, 15, 20, 25, 30

Pattern B: 0, 10, 20, 30, 40, 50, 60

- **A.** Each term in Pattern A is 2 times the corresponding term in Pattern B.
- **B.** Each term in Pattern A is $\frac{1}{2}$ times the corresponding term in Pattern B.
- C. Each term in Pattern A is 5 less than the corresponding term in Pattern B.
- **D.** Each term in Pattern A is 10 less than the corresponding term in Pattern B.

2. 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.** $\frac{20}{24} + \frac{6}{24}$

Use the information provided to answer Part A through Part C for question 3.

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

3. 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 on the following pages.

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 on the following pages.

Part C

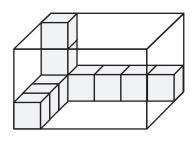
Use your expression from Part B to find the total cost, in dollars, of the fence and the gate.

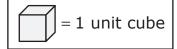
Enter your answer in the space provided on the following pages.





- **4.** Which statement correctly compares two values?
 - **A.** The value of the 6 in 26.495 is $\frac{1}{10}$ the value of the 6 in 17.64.
 - **B.** The value of the 6 in 26.495 is 10 times the value of the 6 in 17.64.
 - **C.** The value of the 6 in 26.495 is $\frac{1}{100}$ the value of the 6 in 17.64.
 - **D.** The value of the 6 in 26.495 is 100 times the value of the 6 in 17.64.
- **5.** What is the volume of the rectangular prism in cubic units?

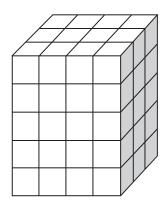




Enter your answer in the box.



6. 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 on the next page.

- **7.** Select the **two** correct statements.
 - **A.** The product of $\frac{3}{5}$ and 4 is greater than 4.
 - **B.** The product of $\frac{3}{5}$ and 4 is less than $\frac{3}{5}$.
 - **C.** The product of $1\frac{1}{2}$ and 2 is greater than $1\frac{1}{2}$.
 - **D.** The product of $1\frac{1}{2}$ and 2 is less than 2.
 - **E.** The product of $\frac{13}{4}$ and $\frac{5}{2}$ is greater than $\frac{13}{4}$.
 - **F.** The product of $\frac{13}{4}$ and $\frac{5}{2}$ is less than $\frac{5}{2}$.

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- **8.** Which figure is always a rectangle?
 - A. square
 - B. rhombus
 - **C.** quadrilateral
 - **D.** parallelogram
- **9.** 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

Use the information provided to answer Part A and Part B for question 10.

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.

10. 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.** $\frac{1}{3}$
- **D.** $\frac{1}{12}$

- **11.** 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 on the next page.



12. 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



You have come to the end of Unit 1 of the test.

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

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