M-STEP Mathematics

Grade 5

Practice Set 5

Instructions

Read each question carefully. For each multiple-choice question, fill in the circle for the correct answer. For other types of questions, follow the directions given in the question.

You may use a ruler to help you answer questions. You may not use a calculator on this test.

This test should take 60 minutes to complete.

1   To add the fractions below, Wayne first needs to determine the least common multiple of the denominators.

$$\frac{1}{5}, \frac{5}{7}, \frac{9}{10}$$

What is the least common multiple of the denominators? Write your answer below.

_____

2   The diagram below shows the length of a piece of ribbon.

$$\frac{12}{100} \text{ meter}$$

Victoria divides the ribbon into 4 equal pieces. What is the length of each piece of ribbon?

(A) $\frac{2}{25}$ meter

(B) $\frac{3}{25}$ meter

(C) $\frac{12}{25}$ meter

(D) $\frac{3}{100}$ meter

3   Donna has $8.45. She spends $3.75. How much money does Donna have left? Write your answer below.

$_____

4   Hannah cut out a piece of fabric to use for an art project. The length of the fabric was 9.5 yards. The width of the fabric was 3.6 yards less than the length. What was the width of the fabric?

   Ⓐ   5.9 yards

   Ⓑ   6.9 yards

   Ⓒ   12.1 yards

   Ⓓ   13.1 yards

5   Errol is putting photos into albums. Each album has 24 pages for holding photos, and each page can hold 8 photographs. How many photographs could Errol put into 3 photo albums?
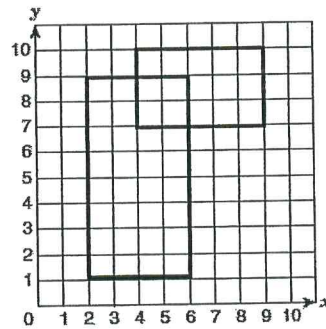
   Ⓐ   192

   Ⓑ   376

   Ⓒ   486

   Ⓓ   576

6 Kathy answered $\frac{3}{5}$ of the questions on a test correctly. Which of the following is equivalent to $\frac{3}{5}$?

Ⓐ   0.3

Ⓑ   0.35

Ⓒ   0.6

Ⓓ   0.65

7 Which ordered pairs represent a point where the edges of the two rectangles intersect? Select **all** the correct answers.

☐   (8, 6)

☐   (6, 7)

☐   (5, 8)

☐   (4, 10)

☐   (7, 9)

☐   (4, 9)

8   To complete a calculation correctly, Mark moves the decimal place of 420.598 two places to the left.

$$420.598 \rightarrow 4.20598$$

Which of these describes the calculation completed?

Ⓐ   Dividing by 10

Ⓑ   Dividing by 100

Ⓒ   Multiplying by 10

Ⓓ   Multiplying by 100

9   Camille cooked a cake on high for $1\frac{1}{4}$ hours. She then cooked it for another $\frac{1}{2}$ hour on low. How long did she cook the cake for in all?

Ⓐ $1\frac{1}{2}$ hours

Ⓑ $1\frac{3}{4}$ hours

Ⓒ $2\frac{1}{4}$ hours

Ⓓ $2\frac{1}{2}$ hours

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10 A play sold $224 worth of tickets. Each ticket cost the same amount. Which of these could be the cost of each ticket? Select **all** the possible answers.
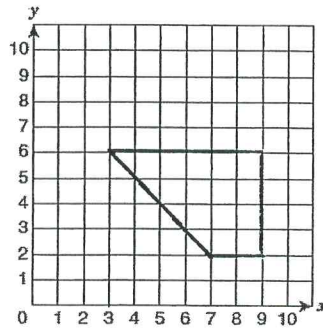
☐ $6

☐ $8

☐ $12

☐ $14

☐ $16

☐ $18

11 A piece of note paper has side lengths of 12.5 centimeters. What is the area of the piece of note paper?

Ⓐ 144.25 square centimeters

Ⓑ 144.5 square centimeters

Ⓒ 156.25 square centimeters

Ⓓ 156.5 square centimeters

12   Cody drew a quadrilateral on a coordinate grid, as shown below.

What are the coordinates of the vertices of the quadrilateral? Write the coordinates below.

(___ , ___)   (___ , ___)   (___ , ___)   (___ , ___)

13   Sandy has $12.90. Marvin has $18.50. What is the total value of their money? Write your answer below.

$ _____

14   The top of a desk is 4 feet long and 3 feet wide. Raymond wants to cover the top of the desk with a vinyl sheet. The vinyl sheet is measured in square inches. What is the area of the vinyl sheet that will cover the top of the desk exactly?

Ⓐ   12 square inches

Ⓑ   144 square inches
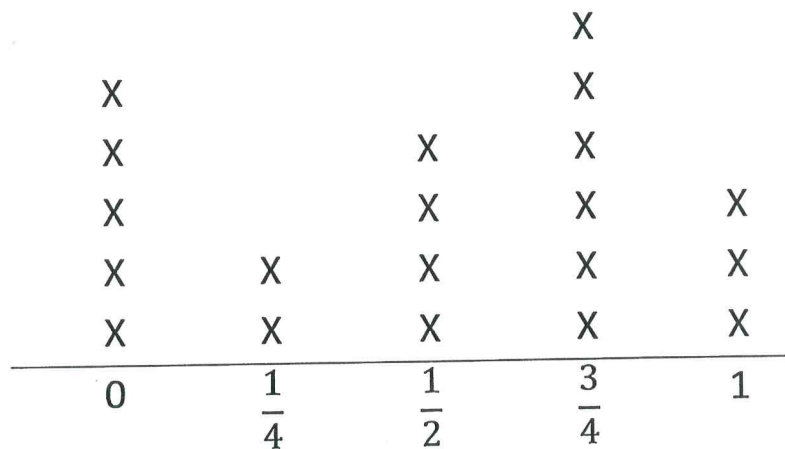
Ⓒ   168 square inches

Ⓓ   1,728 square inches

15 A block is in the shape of a cube. If the side length is represented by x, which of these could be used to find the volume of the cube?

    (A) $3x$

    (B) $6(x^2)$

    (C) $6x$

    (D) x^3

16 Denise made the line plot below to show how long she read for each weekday for 4 weeks.
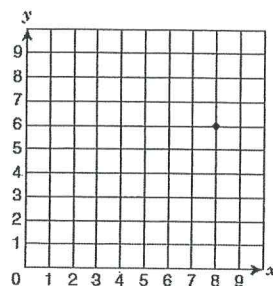
Daily Reading Time (hours)

How long did Denise read for in total over the 4 weeks? Write your answer below.

_____ hours

17 The point below is translated 2 units to the left and 3 units down. What are the coordinates of the point after the translation?

Ⓐ (6, 3)

Ⓑ (6, 9)

Ⓒ (10, 3)

Ⓓ (10, 9)

18 The table below shows the total number of pounds of flour in different numbers of bags of flour.

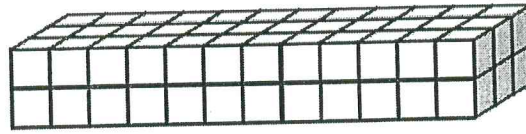| Number of Bags	Number of Pounds
3	12
5	20
8	32
9	36

Based on the relationship in the table, how much flour is in each bag? Give your answer in pounds and then ounces. Write your answers below.

_____ pounds

_____ ounces

19 The model below is made up of 1-centimeter cubes. Complete the number sentence below to find the volume of the model.

$$\boxed{} \times \boxed{} \times \boxed{} = \boxed{}\ \text{cm}^3$$

20 Which decimal is plotted on the number line below?

Ⓐ   2.25

Ⓑ   2.3

Ⓒ   2.6

Ⓓ   2.75

END OF PRACTICE SET