

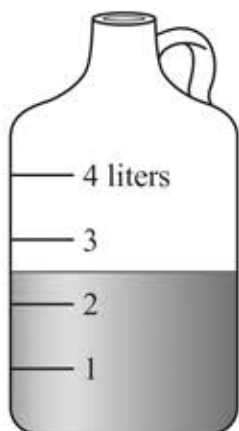
Grade 3 Mathematics

SESSION 1

DIRECTIONS

This session contains six multiple-choice questions and one short-answer question. For multiple-choice questions, mark your answers by filling in the circle next to the best answer. For the short-answer question, write your answer in the space provided.

- 1 Ms. Hanson poured water into a jug, as shown below.



Which of these is closest to the amount of water in the jug?

- A 2 liters
- B $2\frac{1}{2}$ liters
- C 3 liters
- D $3\frac{1}{2}$ liters

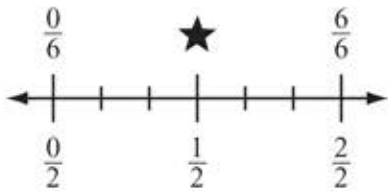
- 2 Jody wrote the expression shown below.

$$(2 \times 3) + (2 \times 5)$$

Which of these is another way to write Jody's expression?

- A 2×8
- B 4×8
- C 4×15
- D 6×10

- 3 Chas drew a number line to show equal fractions, as shown below.



Chas will write a fraction equal to $\frac{1}{2}$ to replace the \star . Which of these fractions should he write to replace the \star ?

- (A) $\frac{1}{6}$
- (B) $\frac{2}{6}$
- (C) $\frac{3}{6}$
- (D) $\frac{4}{6}$

Question 4 is a short-answer question. Write your answer to this question in the Answer Box provided.

4 Compute:

$$42 \div 7$$

Write your answer in the Answer Box below.

Answer Box

4

Mark your choices for multiple-choice questions 5 through 7 by filling in the circle next to the best answer.

- 5 What is 946 rounded to the nearest hundred?

- (A) 800
- (B) 900
- (C) 950
- (D) 1000

- 6 April, June, September, and November each have 30 days. How many days are in the 4 months altogether?

- (A) 34
- (B) 70
- (C) 120
- (D) 136

Use the shapes labeled T from your tool kit to answer question 7.

- 7 Anjani used the shapes labeled T to cover the figure shown below without any gaps or overlaps.



What fraction of the figure does one of the shapes labeled T cover?

- (A) $\frac{1}{3}$
- (B) $\frac{1}{2}$
- (C) $\frac{2}{3}$
- (D) $\frac{3}{1}$

Grade 3 Mathematics

SESSION 2

DIRECTIONS

This session contains seven multiple-choice questions, two short-answer questions, and two open-response questions. For multiple-choice questions, mark your answers by filling in the circle next to the best answer. For the short-answer and open-response questions, write your answer in the space provided.

- 8 A rectangle is shown below.



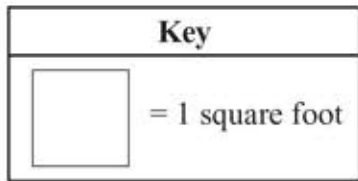
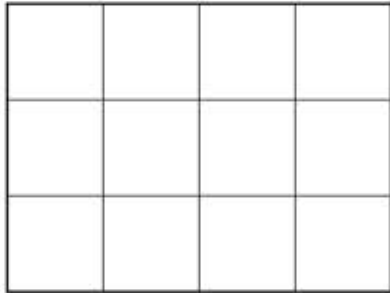
What is the perimeter, in centimeters, of the rectangle?

- A 8 centimeters
- B 10 centimeters
- C 15 centimeters
- D 16 centimeters

- 9 In which of these patterns is the next number an **odd** number?

- A 2, 4, 6, 8, ...
- B 7, 12, 17, 22, ...
- C 18, 15, 12, 9, ...
- D 24, 20, 16, 12, ...

- 10 Amy's house has a porch that is covered with 1-square-foot tiles. The porch is in the shape of a rectangle, as shown below.



Amy counted the tiles to find the area of the porch.

Which of these is another way Amy could find the area, in square feet, of the porch?

- (A) $(4 + 3) + (4 + 3)$
- (B) $(4 \times 3) + (4 \times 3)$
- (C) $4 + 3$
- (D) 4×3

Question 11 is a short-answer question. Write your answer to this question in the Answer Box provided.

- 11 There are 6 children on a bus. Each child is wearing a hat.
What **fraction** of the children on the bus are wearing a hat? Write your answer in the Answer Box below.

Answer Box

11

Question 12 is a short-answer question. Write your answer to this question in the Answer Box provided.

- 12 Claire wrote a number that is greater than zero on her paper. When Claire's number is multiplied by any whole number, the last digit of the product is always 0.

In the Answer Box below, write a number that could be Claire's number.

Answer Box

12

Write your answers to parts (a) and (b) of open-response question 13 in the spaces provided.

- 13 A rectangle is shown below.

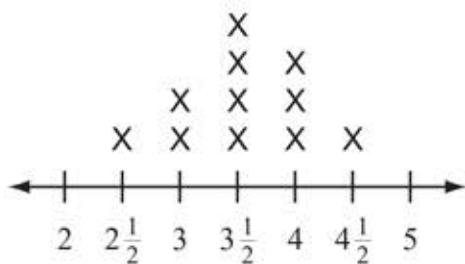


a. Draw line segments on the rectangle to divide the rectangle into 8 equal parts.

b. What fraction of the area of the whole rectangle is the area of each part?

Mark your choices for multiple-choice questions 14 through 17 by filling in the circle next to the best answer.

- 14 Each student in a third-grade class made a paper snowflake and measured its length. The line plot below shows the length, in inches, of each paper snowflake.



Length of Paper Snowflakes
(in inches)

What is the length, in inches, of the longest paper snowflake?

- (A) $3\frac{1}{2}$
- (B) 4
- (C) $4\frac{1}{2}$
- (D) 5

- 15 Ryan put 24 books on shelves. He put 8 books on each shelf.

Which equation can be used to find s , the number of shelves Ryan put books on?

- (A) $8 \times 24 = s$
- (B) $8 \div 24 = s$
- (C) $s \times 8 = 24$
- (D) $s \div 8 = 24$

- 16 A pet store has 5 fish tanks with 10 fish in each tank. A shopper buys 8 fish and takes them home.

After the shopper leaves the store, what is the total number of fish left in the pet store's tanks?

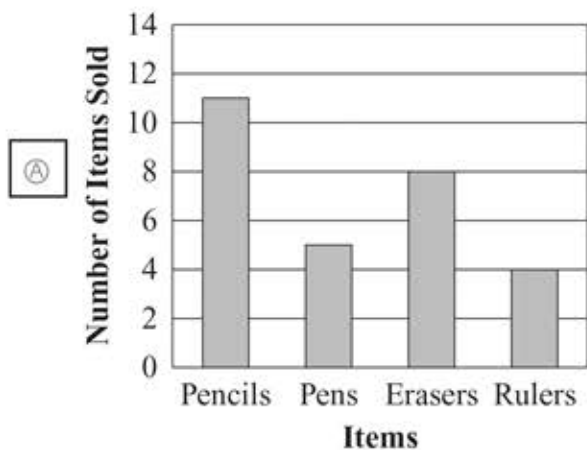
- (A) 23
- (B) 42
- (C) 50
- (D) 58

17 On Monday, the school store sold pencils, pens, erasers, and rulers.

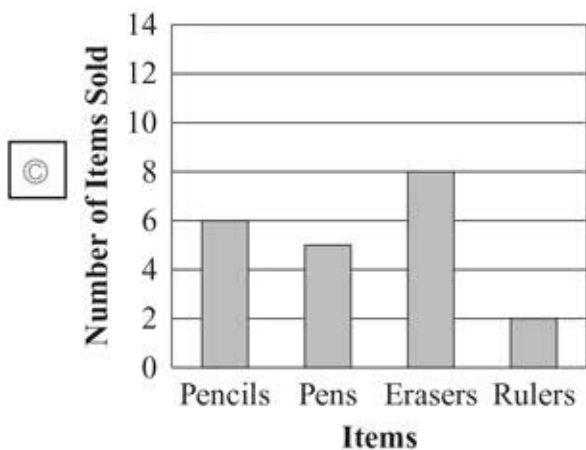
- The store sold 6 more pencils than pens.
- The store sold 2 times as many erasers as rulers.

Which of these bar graphs could show the items that were sold on Monday?

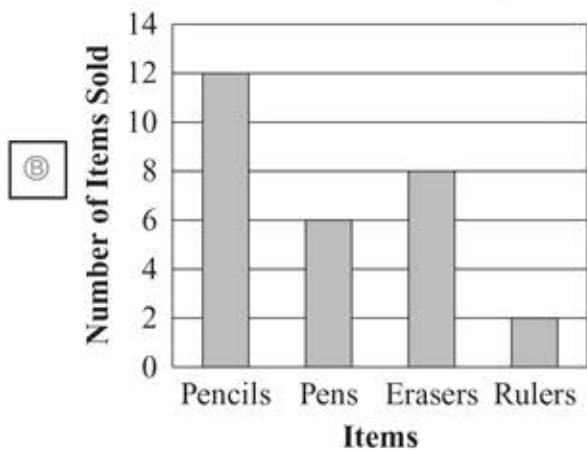
School Store Sales on Monday



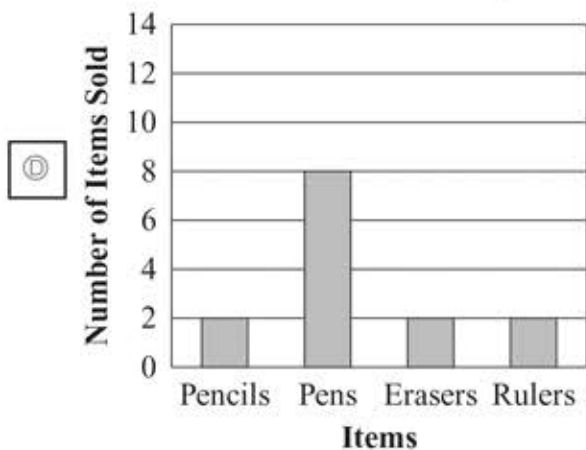
School Store Sales on Monday



School Store Sales on Monday



School Store Sales on Monday



Write your answers to parts (a) and (b) of open-response question 18 in the spaces provided.

- 18 Christopher planted 24 bean plants in his garden. He placed the bean plants in 4 rows. Each row had the same number of plants.

a. Draw an array to show how Christopher placed all the bean plants in his garden.

b. How many bean plants did Christopher place in each row?

Grade 3 Mathematics

Item No.	Reporting Category	Standard	Correct Answer (MC/SA)*
1	<i>Measurement and Data</i>	MD.2	B
2	<i>Operations and Algebraic Thinking</i>	OA.5	A
3	<i>Number and Operations-Fractions</i>	NF.3	C
4	<i>Operations and Algebraic Thinking</i>	OA.7	6
5	<i>Number and Operations In Base Ten</i>	NBT.1	B
6	<i>Number and Operations In Base Ten</i>	NBT.3	C
7	<i>Geometry</i>	G.2	A
8	<i>Measurement and Data</i>	MD.8	D
9	<i>Operations and Algebraic Thinking</i>	OA.9	B
10	<i>Measurement and Data</i>	MD.7	D
11	<i>Number and Operations-Fractions</i>	NF.3	6/6
12	<i>Number and Operations In Base Ten</i>	NBT.3	Any multiple of 10
13	<i>Geometry</i>	G.2	
14	<i>Measurement and Data</i>	MD.4	C
15	<i>Operations and Algebraic Thinking</i>	OA.6	C
16	<i>Operations and Algebraic Thinking</i>	OA.8	B
17	<i>Measurement and Data</i>	MD.3	A
18	<i>Operations and Algebraic Thinking</i>	OA.3	

* Answers are provided here for multiple-choice and short-answer items only. Sample responses and scoring guidelines for open-response items, which are indicated by the shaded cells,