## **Grade 3 Test Specs**

#### Multiple Choice

*Identify the choice that best completes the statement or answers the question.* 

- Nathan paid \$2 for each of the 3 books he bought at a bookstore. He can use the expression  $3 \times 2$  to find the total amount he paid for the 3 books. Which of the following is equal to  $3 \times 2$ ?
  - a. 3 + 3 + 3

c. 3 + 2 + 3

b. 2 + 2 + 2

- d.  $2 \times +3 +3$
- 2. Raymond has 5 pictures of each of 3 types of ocean dolphins. He also has 4 pictures of river dolphins. The expression below represents the total number of dolphin pictures Raymond has.

$$(3 \times 5) + 4$$

Which expression below also represents the total number of dolphin pictures Raymond has?

a.  $4 + (5 \times 3)$ 

c.  $(3+4) \times (5+4)$ 

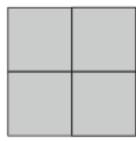
b.  $3 \times (5 \times 4)$ 

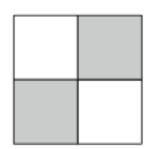
- d.  $(3 \times 5) + (3 \times 4)$
- 3. A group of 24 people is getting on a roller coaster. Each car of the roller coaster can hold 4 people. Which equation could be used to find the number of roller coaster cars needed to hold all 24 people?
  - a.  $24 + 4 = \square$

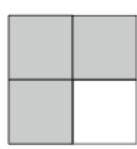
c.  $\Box + 4 = 24$ 

b.  $24 \times 4 = \Box$ 

- d.  $\square \times 4 = 24$
- 4. Rosalyn drew three figures and shaded parts of each figure.







If each big square is equal to 1, what mixed number is represented by the shading of the three figures above?

a.  $2\frac{1}{4}$ 

c.  $3\frac{1}{4}$ 

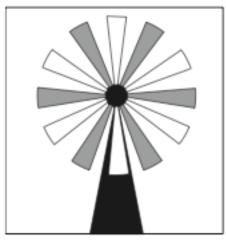
b.  $2\frac{3}{4}$ 

d.  $3\frac{1}{2}$ 

\_\_ 5. Two windmills are pictured below. On Windmill A,  $\frac{1}{2}$  of the blades are shaded gray. On Windmill B,

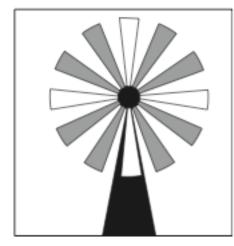
 $\frac{2}{3}$  of the blades are shaded gray.

Windmill A



 $\frac{1}{2}$ 

Windmill B



 $\frac{2}{3}$ 

Which inequality below correctly compares the fractions of blades that are shaded gray?

- a.  $\frac{2}{3} < \frac{1}{2}$
- b.  $\frac{2}{3} > \frac{1}{2}$

- c.  $\frac{3}{2} < \frac{2}{1}$
- d.  $\frac{3}{2} > \frac{2}{1}$

6. Ramona filled 10 party balloons with air. She noticed that  $\frac{4}{10}$  of the balloons were striped, as shown below.



Which fraction is equal to  $\frac{4}{10}$ ?

a.  $\frac{2}{5}$ 

c.  $\frac{2}{3}$ 

b.  $\frac{2}{3}$ 

d.  $\frac{2}{8}$ 

7. Andrew bought the frame shown below for his sports picture.



Which best describes the shape of the frame?

a. parallelogram

c. rhombus

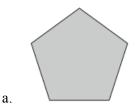
b. pentagon

d. trapezoid

8. Becky has two shape stickers, as shown below.



Which of the following figures can Becky make by combining the stickers, without overlapping?





b.



d.



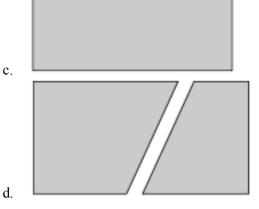
9. Sam cut a rectangular piece of paper into 2 congruent pieces. Which could be the two pieces of paper?



b.



c.



\_\_\_\_ 10. Allison is making lemonade for a party. The table below shows the number of lemons she will need to make several pitchers of lemonade.

LEMONS NEEDED FOR LEMONADE

| Number of Pitchers | Number of Lemons |
|--------------------|------------------|
| 2                  | 10               |
| 5                  | 25               |
| 8                  | 40               |
| 9                  | ?                |

According to the relationship shown in the table, how many lemons will Allison need to make 9 pitchers of lemonade?

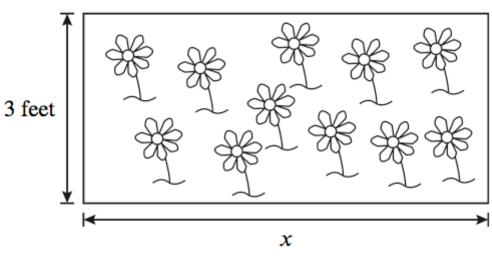
a. 5

c. 45

b. 55

- d. 65
- 11. The perimeter of the flower garden is 20 feet, as shown below.

## FLOWER GARDEN



a. 17 feet

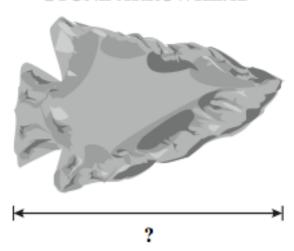
c. 7 feet

b. 14 feet

d. 10 feet

\_\_\_\_ 12. Terrence found a stone arrowhead like the one shown below.

## STONE ARROWHEAD

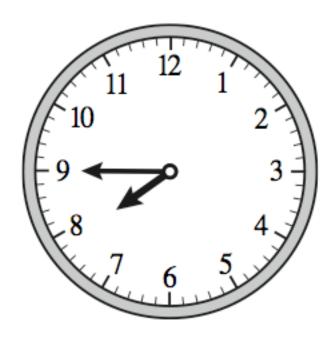


Using the provided ruler, what is the exact length, in inches, of the stone arrowhead?

- a. 2 inches
- b.  $2\frac{1}{2}$  inches

- c.  $2\frac{1}{4}$  inches
- d.  $2\frac{1}{8}$  inches

\_\_\_\_ 13. Trina went to see a play. The clock below shows the time that Trina got to the theater.



If the play started at 8:00, how many minutes did Trina wait at the theater before the play started?

a. 45 minutes

c. 15 minutes

b. 30 minutes

d. 5 minutes

14. Ms. Tanaka is ordering calendars for the students at 4 elementary schools. The table below shows the number of students at each of the schools.

#### STUDENTS IN ELEMENTARY SCHOOLS

| Name of School | Number of Students |
|----------------|--------------------|
| Greendale      | 1,789              |
| Jones Park     | 1,032              |
| Shady River    | 2,115              |
| Wakefield      | 1,992              |

Which is the best estimate of the total number of calendars Ms. Tanaka needs to order for all 4 schools?

a. 4,000

c. 7,000

b. 5,000

d. 8,000

15. The table below shows shirt colors, pants colors, and team figures that Deron can choose for his football team.

| Shirt Color | Pants Color | Team Figure |  |
|-------------|-------------|-------------|--|
| Orange (O)  | Black (B)   | Eagles (E)  |  |
| Red (R)     | White (W)   | Tigers (T)  |  |

Deron will choose 1 shirt color, 1 pants color, and 1 team figure. How many possible combinations of 1 shirt color, 1 pants color, and 1 team figure does Deron have to choose from?

10 a. b. 8

- c. 6
- d. 4
- 16. The students in Mrs. Livingston's class voted for their favorite kind of footwear. The number of votes are shown on the table below.

#### **FAVORITE FOOTWEAR**

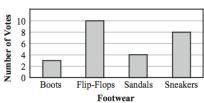
| Footwear        | Boots | Flip-Flops | Sandals | Sneakers |
|-----------------|-------|------------|---------|----------|
| Number of Votes | 3     | 8          | 4       | 10       |

Flip-Flops Sandals

Sneakers

Which bar graph correctly shows the number of votes on the table?





FAVORITE FOOTWEAR

Footwear

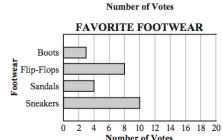
Sandals

Sneakers

Flip-Flops



c.



FAVORITE FOOTWEAR

8 10 12 14 16 18 20

b.

Number of Votes 10

8 6 4

**Boots** 

a.

# **Grade 3 Test Specs Answer Section**

### MULTIPLE CHOICE

| 1.  | ANS: | В | PTS: | 1 | STA: | MA.3.A.1.1 |
|-----|------|---|------|---|------|------------|
| 2.  | ANS: | A | PTS: | 1 | STA: | MA.3.A.1.2 |
| 3.  | ANS: | D | PTS: | 1 | STA: | MA.3.A.1.3 |
| 4.  | ANS: | A | PTS: | 1 | STA: | MA.3.A.2.1 |
| 5.  | ANS: | В | PTS: | 1 | STA: | MA.3.A.2.3 |
| 6.  | ANS: | A | PTS: | 1 | STA: | MA.3.A.2.4 |
| 7.  | ANS: | D | PTS: | 1 | STA: | MA.3.G.3.1 |
| 8.  | ANS: | В | PTS: | 1 | STA: | MA.3.G.3.2 |
| 9.  | ANS: | В | PTS: | 1 | STA: | MA.3.G.3.3 |
| 10. | ANS: | C | PTS: | 1 | STA: | MA.3.A.4.1 |
| 11. | ANS: | C | PTS: | 1 | STA: | MA.3.G.5.1 |
|     |      |   |      |   |      |            |

12. ANS: C

Note: Answer may change depending on the printer scale used for the test.

|     | PTS: | 1 | STA: | MA.3.G.5.2 |      |            |
|-----|------|---|------|------------|------|------------|
| 13. | ANS: | C | PTS: | 1          | STA: | MA.3.G.5.3 |
| 14. | ANS: | C | PTS: | 1          | STA: | MA.3.A.6.1 |
| 15. | ANS: | В | PTS: | 1          | STA: | MA.3.A.6.2 |
| 16. | ANS: | D | PTS: | 1          | STA: | MA.3.S.7.1 |