

# MATHEMATICS Grade 3

## **2015 Released Test Questions**

**1** The expanded notation of a number is shown.

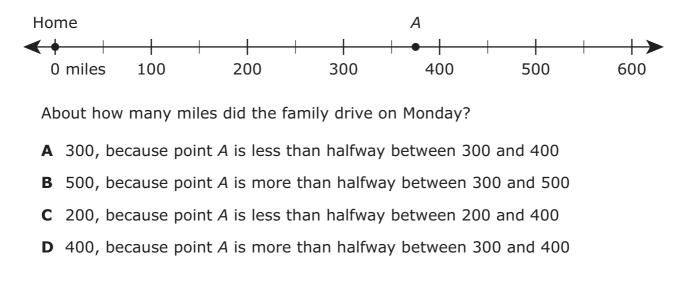
$$(3 \times 10,000) + (8 \times 100) + (2 \times 10) + (6 \times 1)$$

What is this number written in standard form?

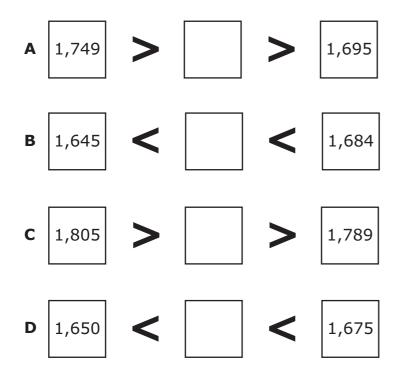
- **A** 38,026
- **B** 38,260
- **C** 3,826
- **D** 30,826

- 2 Which statement about the number 5,555 is true?
  - **A** There is a 5 in the tens place, so 5 times 10 equals 50.
  - **B** There is a 5 in the hundreds place, so 5 times 100 equals 50.
  - **C** There is a 5 in the tens place, so 5 times 10 equals 500.
  - **D** There is a 5 in the thousands place, so 5 times 1,000 equals 500.

**3** The Leija family is on a road trip. The number line represents the distance the family drove on Monday from their home to point *A*.

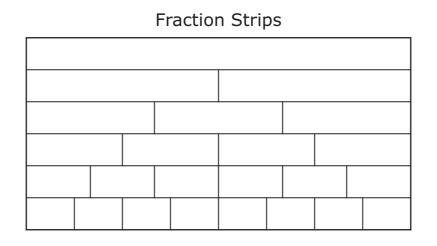


#### 4 In which empty square would the number 1,677 make the comparison true?



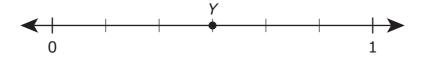
- **5** A farmer gave  $\frac{1}{4}$  of a bale of hay to a horse each day on Monday, Tuesday, and Wednesday. Which equation can be used to find the fraction of a bale of hay the farmer gave the horse on these three days?
  - **A**  $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$  **B**  $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{12}$  **C**  $\frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \frac{3}{7}$ **D**  $\frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \frac{3}{21}$

**6** Alyssa used fraction strips like the ones shown in the diagram in order to find equivalent fractions.



Which list shows only fractions that are equivalent to $\frac{1}{2}$	?
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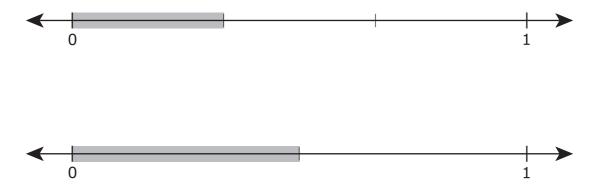
**A**  $\frac{2}{4}, \frac{3}{6}, \frac{4}{8}$  **B**  $\frac{2}{4}, \frac{4}{6}, \frac{6}{8}$  **C**  $\frac{1}{4}, \frac{1}{6}, \frac{1}{8}$ **D**  $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$  **7** Point *Y* is labeled on the number line.



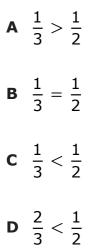
Which statement is true?

- A Point Y represents  $\frac{3}{6}$  and  $\frac{3}{4}$ , because both fractions represent 3 equal parts of a whole.
- **B** Point *Y* represents  $\frac{3}{6}$  and  $\frac{1}{2}$ , because both fractions are exactly halfway between 0 and 1 on the number line.
- **C** Point *Y* represents  $\frac{4}{6}$  and  $\frac{3}{6}$ , because both fractions represent 6 equal parts of a whole.
- **D** Point *Y* represents  $\frac{4}{6}$  and  $\frac{1}{2}$ , because both fractions are exactly halfway between 0 and 1 on the number line.

**8** Daniel shaded these two number lines to model two different fractions.



Based on the number lines, which comparison is true?



- **9** Ms. Elizondo shipped yogurt cups to stores on Monday.
  - She shipped 648 cups of strawberry yogurt.
  - She shipped 216 cups of peach yogurt.
  - She shipped 264 cups of vanilla yogurt.

How many more cups of strawberry yogurt did Ms. Elizondo ship than cups of peach and vanilla yogurt combined?

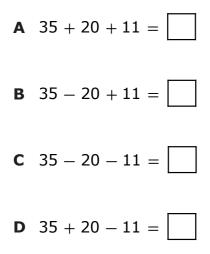
- **A** 168
- **B** 480
- **C** 248
- **D** 178

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

**<sup>10</sup>** Rebekah planted 21 flowers in her garden. She planted the flowers in 3 rows with the same number of flowers in each row. How many flowers did she plant in each row?

- **11** A music teacher had 4 boxes of recorders. There were 9 recorders in each box. The music teacher gave an equal number of recorders to each of 6 classes. How many recorders did each class receive?
  - **A** 7
  - **B** 6
  - **C** 30
  - **D** 36

**12** There were 35 pretzels at a bakery. A baker made 20 more pretzels. The baker then sold 11 pretzels. Which equation shows how to find the number of pretzels there are now?



**13** Larry has 14 oranges. He will cut each of these oranges into 7 slices. Which array can be used to find the number of orange slices he will have?

Β

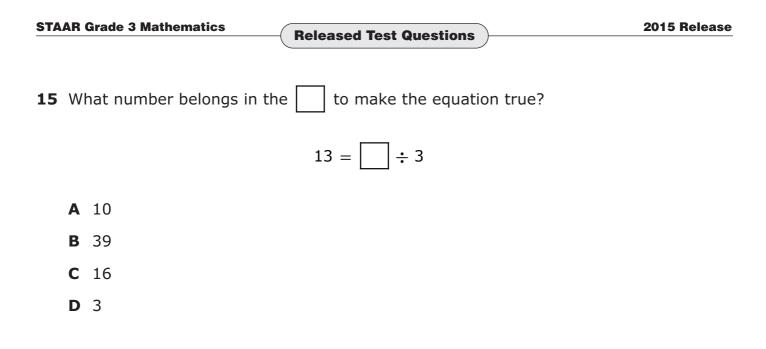
D

**14** Tyler read 10 books. The number of books Eli read can be represented by this expression.

#### 4 imes 10

Which statement is true?

- **A** Tyler read 10 times the number of books Eli read.
- **B** Eli read 10 times the number of books Tyler read.
- **C** Tyler read 4 times the number of books Eli read.
- **D** Eli read 4 times the number of books Tyler read.



**16** There are 10 sunglasses in each display case at a store. Which table shows the number of sunglasses in different numbers of these display cases?

#### Sunglasses

Α	Number of Display Cases		6	11	12
	Number of Sunglasses	20	30	40	50

### Sunglasses

В	Number of Display Cases	2	6	11	12
	Number of Sunglasses	20	60	110	120

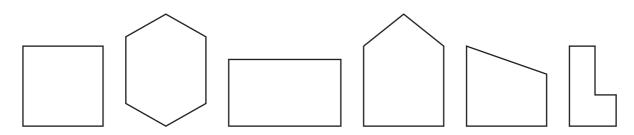
#### Sunglasses

C	Number of Display Cases		6	11	12
	Number of Sunglasses	20	60	100	140

#### Sunglasses

D	Number of Display Cases	2	6	11	12
	Number of Sunglasses	10	20	30	40

**17** The figures shown can be sorted into groups.

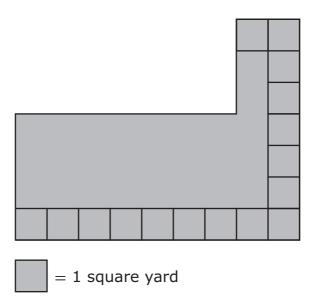


Which of these shows a correct way to group these figures?

- **A** 3 rectangles and 3 hexagons
- **B** 2 hexagons and 4 quadrilaterals
- **C** 2 hexagons, 2 pentagons, and 2 rectangles
- **D** 1 pentagon, 2 hexagons, and 3 quadrilaterals

- **18** Joseph counted the square tiles on the ceiling of his rectangular closet. The area of each tile is 1 square foot. The ceiling has 5 rows of tiles with 4 tiles in each row. What is the area of the ceiling of Joseph's closet in square feet?
  - **A** 20 square feet
  - **B** 10 square feet
  - C 18 square feet
  - **D** 9 square feet

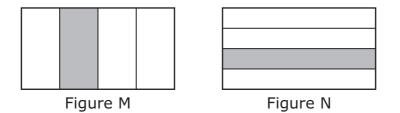
**19** The diagram represents the floor of a storage building. The floor is composed of two rectangles.



What is the area of the floor in square yards?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

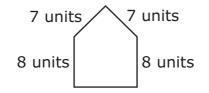
**20** The two figures shown are congruent, and one-fourth of each figure is shaded.



Which statement about the shaded parts of these figures is true?

- **A** The area of the shaded part of Figure M is greater than the area of the shaded part of Figure N.
- **B** The area of the shaded part of Figure M is less than the area of the shaded part of Figure N.
- **C** The area of the shaded part of Figure M is equal to the area of the shaded part of Figure N.
- **D** None of the above

**21** The lengths of four sides of a polygon are shown in the diagram.

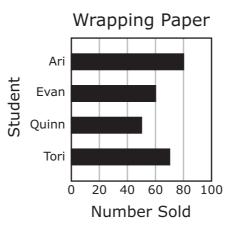


The perimeter of the polygon is 40 units. What is the missing length in units?

- A 8 units
- **B** 15 units
- **C** 10 units
- **D** 30 units

- **22** Olga uses the same amount of water to fill her water bottle every day. Which unit of measurement should Olga use to measure the amount of water in her water bottle?
  - A Pound
  - B Fluid ounce
  - C Yard
  - **D** Ounce

**23** The graph shows the number of rolls of wrapping paper sold by four students.



Which table represents the information in the graph?

	Student	Number Sold
Α	Ari	80
	Evan	60
Quinn		50
	Tori	70

#### Wrapping Paper

	Student	Number Sold
B Ari		80
_	Evan	60
	Quinn	40
	Tori	60

#### Wrapping Paper

	Student	Number Sold
с	Ari	80
Evan		60
Quinn		45
	Tori	65

#### Wrapping Paper

	Student	Number Sold
D	Ari	80
-	Evan	60
	Quinn	60
	Tori	80

- **24** Bad weather destroyed most of the peaches on the peach trees in an orchard. This will have an effect on the price of the remaining peaches. Which statement best describes the effect on the price?
  - **A** The price will likely increase, because there are more peaches available to buy.
  - **B** The price will likely decrease, because there are more peaches available to buy.
  - **C** The price will likely increase, because there are fewer peaches available to buy.
  - **D** The price will likely decrease, because there are fewer peaches available to buy.

- **25** Claire borrowed \$20 from her mom in order to buy game tokens at a festival. Her mom said Claire would have to pay the money back with interest. Which statement best explains what Claire's mom meant?
  - **A** She expected Claire to pay back only the money she borrowed.
  - **B** She expected Claire to pay back only part of the money she borrowed.
  - **C** She expected Claire to keep the money she borrowed and not pay any of it back.
  - **D** She expected Claire to pay back the money she borrowed plus an additional amount of money.

Item Number	Correct Answer	Reporting Category	Readiness or Supporting	Content Student Expectation	Process Student Expectation
1	D	1	Readiness	3.2(A)	3.1 (B),(F)
2	А	1	Supporting	3.2(B)	3.1 (B),(G)
3	D	1	Supporting	3.2(C)	3.1 (A),(B),(C),(E),(G)
4	В	1	Readiness	3.2(D)	3.1 (B),(F)
5	А	1	Supporting	3.3(D)	3.1 (A),(B),(D),(F)
6	А	1	Readiness	3.3(F)	3.1 (A),(B),(E),(F)
7	В	1	Supporting	3.3(G)	3.1 (B),(E),(G)
8	С	1	Readiness	3.3(H)	3.1 (A),(B),(E),(F)
9	А	2	Readiness	3.4(A)	3.1 (A),(B),(F)
10	7	2	Supporting	3.4(F)	3.1 (A),(B),(F)
11	В	2	Readiness	3.4(K)	3.1 (A),(B),(F)
12	D	2	Readiness	3.5(A)	3.1 (A),(B),(D),(F)
13	А	2	Readiness	3.5(B)	3.1 (A),(B),(E),(F)
14	D	2	Supporting	3.5(C)	3.1 (A),(B),(G)
15	В	2	Supporting	3.5(D)	3.1 (B),(F)
16	В	2	Readiness	3.5(E)	3.1 (A),(B),(D),(F)
17	D	3	Readiness	3.6(A)	3.1 (B),(E),(F)
18	А	3	Readiness	3.6(C)	3.1 (A),(B),(F)
19	42	3	Supporting	3.6(D)	3.1 (A),(B),(E),(F)
20	С	3	Supporting	3.6(E)	3.1 (B),(E),(G)
21	С	3	Readiness	3.7(B)	3.1 (B),(E),(F)
22	В	3	Supporting	3.7(D)	3.1 (A),(B),(C),(F)
23	А	4	Readiness	3.8(A)	3.1 (A),(B),(D),(F)
24	С	4	Supporting	3.9(B)	3.1 (A),(B),(G)
25	D	4	Supporting	3.9(D)	3.1 (A),(B),(G)