State of Texas Assessments of Academic Readiness

GRADE 3

Mathematics

Practice Assessment

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STAAR GRADE 3 MATHEMATICS REFERENCE MATERIALS

LENGTH

Customary	Metric
1 mile (mi) = 1,760 yards (yd)	1 kilometer (km) = 1,000 meters (m)
1 yard (yd) = 3 feet (ft)	1 meter (m) = 100 centimeters (cm)
1 foot (ft) = 12 inches (in.)	1 centimeter (cm) = 10 millimeters (mm)

VOLUME AND CAPACITY

Customary	Metric
1 gallon (gal) = 4 quarts (qt)	1 liter (L) = 1,000 milliliters (mL)
1 quart (qt) = 2 pints (pt)	
1 pint (pt) = 2 cups (c)	
1 cup (c) = 8 fluid ounces (fl oz)	

WEIGHT AND MASS

Customary	Metric
1 ton (T) = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)

TIME

1 year = 12 months

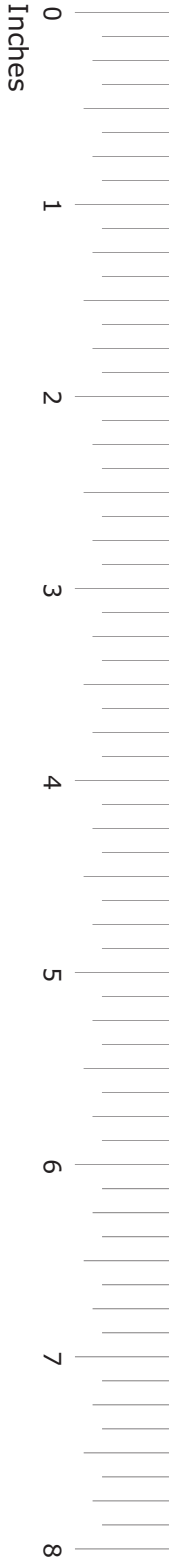
1 year = 52 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds



STAAR GRADE 3 MATHEMATICS REFERENCE MATERIALS

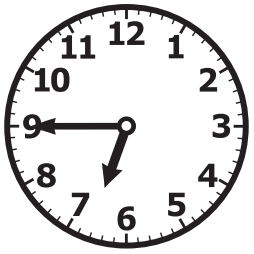
This page shows only the metric ruler.

MATHEMATICS

DIRECTIONS

Read each question carefully. Choose the best answer to each question. For open-response questions, determine the best answer to the question.

1 The clock shows the time a movie started.



The movie lasted 1 hour 15 minutes. Which time is closest to the time the movie ended?

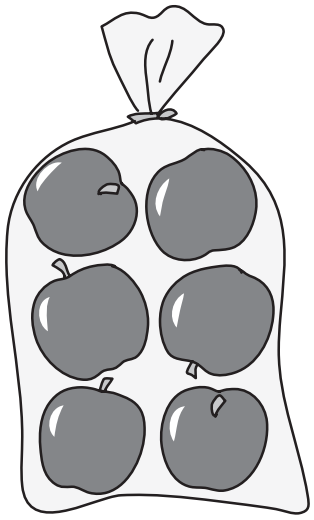
Ⓐ 8:00

Ⓑ 10:45

Ⓒ 5:30

Ⓓ 7:24

2 There are 6 apples in each of 7 bags like the one shown.



What is the total number of apples in all 7 bags?

Ⓐ 7

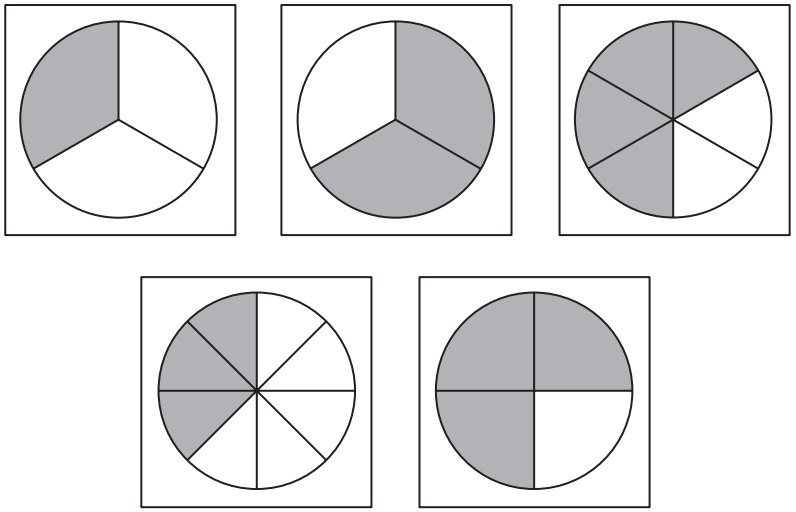
Ⓑ 48

Ⓒ 13

Ⓓ 42

3 Each model shown is shaded to represent a fraction. Which models are shaded to represent fractions equivalent to $\frac{2}{3}$?

Circle **TWO** correct answers.



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4 A teacher bought 18 red markers and 6 boxes of blue markers. Each box had 10 blue markers. What is the total number of markers the teacher bought?

Ⓐ 78

Ⓑ 34

Ⓒ 60

Ⓓ 24

5 The tops of two boxes will be completely covered with 1-inch square tiles.

- Box 1 will be covered with 6 rows of 8 tiles each.
- Box 2 will be covered with 10 rows of 4 tiles each.

What is the area of the top of each box in square inches?

Select the correct answer for each box. Each answer may be used more than once. Not all answers will be used.

A 14	**B** 24	**C** 28	**D** 40	**E** 48

Area of the top of Box 1: Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ square inches

Area of the top of Box 2: Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ square inches

---

6 A farmer sold 15 small pumpkins. The number of large pumpkins the farmer sold can be represented by the expression 3×15.

Which statement about the pumpkins is true?

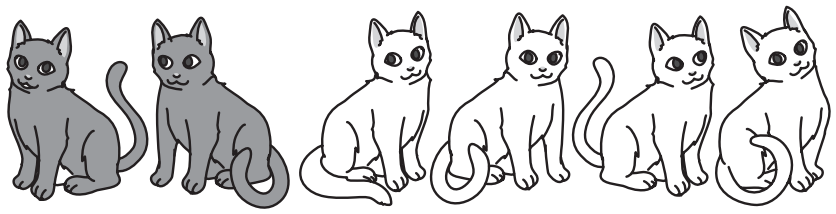
Ⓐ The number of large pumpkins sold is 15 times the number of small pumpkins sold.

Ⓑ The number of small pumpkins sold is 15 times the number of large pumpkins sold.

Ⓒ The number of large pumpkins sold is 3 times the number of small pumpkins sold.

Ⓓ The number of small pumpkins sold is 3 times the number of large pumpkins sold.

7 A group of 6 kittens is shown. Some kittens are gray, and some kittens are white.



Which expression represents the fraction of the group of kittens that are white?

Ⓐ $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

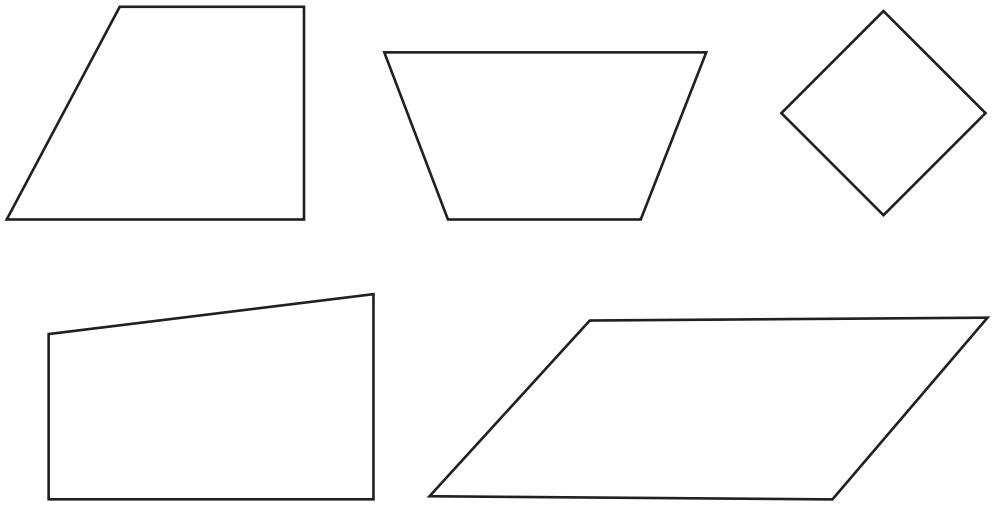
Ⓑ $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

Ⓒ $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

Ⓓ $\frac{1}{4} + \frac{1}{4}$

8 Which figures appear to be parallelograms?

Circle **TWO** correct answers.



GO ON

9 Claire has 12 wooden blocks. She placed the blocks into 4 equal groups.

Which strip diagram shows how to find the number of blocks in each group?

Ⓐ

4	4	4

Ⓑ

12	12	12

Ⓒ

3	3	3	3

Ⓓ

4	4	4	4

---

10 Alberto works at a candy store. He is paid for the hours he works at the store. He works a different number of hours each week.

Which statement is most likely true?

Ⓐ The more hours Alberto works, the less he earns.

Ⓑ The fewer hours Alberto works, the less he earns.

Ⓒ The more hours Alberto works, the less labor he provides the store.

Ⓓ The fewer hours Alberto works, the more labor he provides the store.

11 The table shows the relationship between the number of toy robots a company makes and the number of wheels needed for those robots.

Wheels Needed for Toy Robots

Robots Made	3	8	13	18
Wheels Needed	9	24	39	54

What is the relationship between the number of robots made and the number of wheels needed?

Select **ONE** correct answer in each box to complete the sentence.

The number of wheels needed is equal to the number of

robots [Ⓐ plus / Ⓑ times] [Ⓐ 3 / Ⓑ 5 / Ⓒ 6 / Ⓓ 15].

GO ON

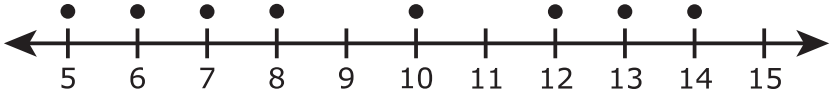
12 Tyler kept a record of how many eggs he collected each day for 14 days. The list shows his data.

14 7 6 12 5 13 8 6 10 12 6 8 6 14

Which dot plot correctly represents the data Tyler recorded?

Eggs Collected

Ⓐ

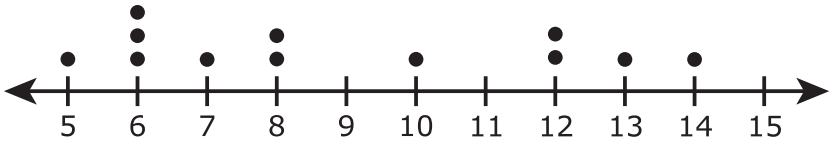


Number of Eggs

Each ● means 1 day.

Eggs Collected

Ⓑ

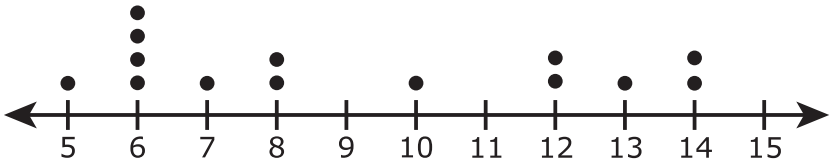


Number of Eggs

Each ● means 1 day.

Eggs Collected

Ⓒ

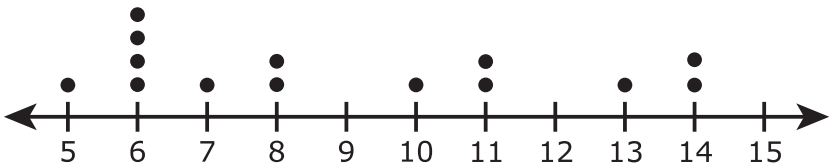


Number of Eggs

Each ● means 1 day.

Eggs Collected

Ⓓ



Number of Eggs

Each ● means 1 day.

13 A jar is full of nickels and dimes. There are 368 nickels in the jar. There are 109 more dimes than nickels in the jar.

What is the total number of nickels and dimes in the jar?

Ⓐ 477

Ⓑ 845

Ⓒ 259

Ⓓ 735

---

14 The point on the number line represents the number of people at a parade.

Which statement best describes the number of people at the parade?

Ⓐ The number of people at the parade was less than 8,000.

Ⓑ The number of people at the parade was greater than 10,000.

Ⓒ The number of people at the parade was about 10,000 because the point is closer to 10,000.

Ⓓ The number of people at the parade was about 8,000 because the point is closer to 8,000.

15 A group of figures is shown.

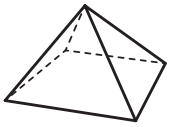


Figure 1

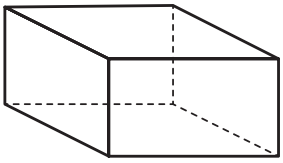


Figure 2

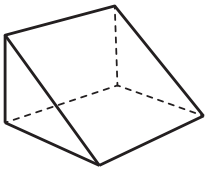


Figure 3

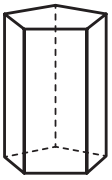


Figure 4

Which statement appears to be true about all the figures in the group?

Ⓐ All the figures have at least 1 rectangular face.

Ⓑ All the figures have at least 1 triangular face.

Ⓒ All the figures are prisms.

Ⓓ All the figures are polygons.

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16 Skye completed 3 levels of a computer game.

- She won 465 points in Level 1.
- She lost 192 points in Level 2.
- She won 309 points in Level 3.

Which equations can be used to find the total number of points Skye had at the end of Level 3?

Select **TWO** correct answers.

◯ 465 + 309 = ☐

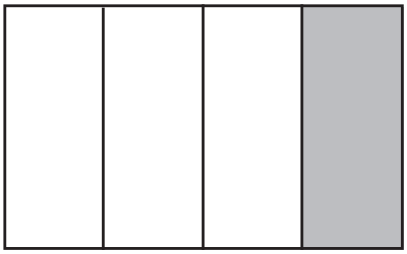
◯ 465 + 309 – 192 = ☐

◯ 465 + 309 + 192 = ☐

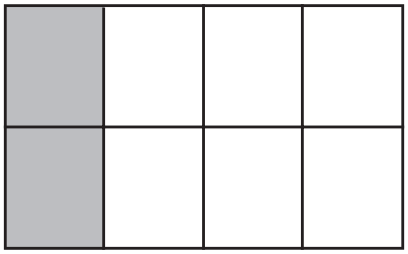
◯ 465 – 192 + 309 = ☐

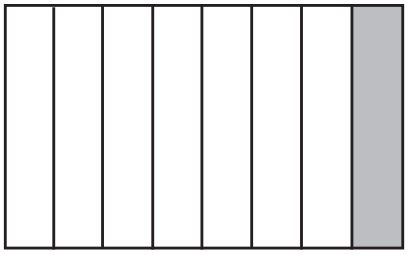
◯ 465 – 192 = ☐

17 This model is shaded to represent a fraction.

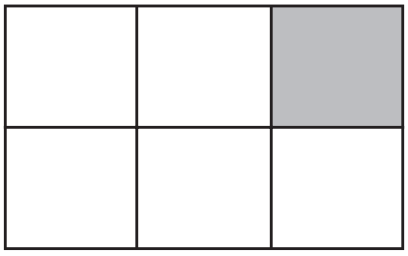


Which of these models represents an equivalent fraction?

Ⓐ 

Ⓑ 

Ⓒ

Ⓓ 

18 Rami made 54 muffins. He put the muffins in boxes with 6 muffins in each box.

What is the total number of boxes Rami needed for all the muffins?

Ⓐ 48

Ⓑ 60

Ⓒ 9

Ⓓ 6

---

19 Maia puts some of her earnings into a savings account each month. Which statement about Maia's savings account is true?

Ⓐ Maia will have to pay interest on the money in her savings account.

Ⓑ The savings account allows Maia to plan for a large purchase sometime in the future.

Ⓒ Maia must put the same amount into her savings account every month.

Ⓓ The bank will not allow Maia to spend the money in her savings account until she goes to college.

20 Glynna will put the same number of candles on each of 4 cakes. She bought 3 boxes of candles. Each box has 8 candles. Glynna will use all the candles.

Which equation can be used to find the number of candles Glynna should put on each cake?

Ⓐ $3 \times 8 \times 4 = \square$

Ⓑ $3 + 8 \div 4 = \square$

Ⓒ $3 + 8 \times 4 = \square$

Ⓓ $3 \times 8 \div 4 = \square$

---

21 Samantha drew an octagon with each side length measuring 3 centimeters. What is the perimeter of the octagon in centimeters?

Ⓐ 11 cm

Ⓑ 24 cm

Ⓒ 16 cm

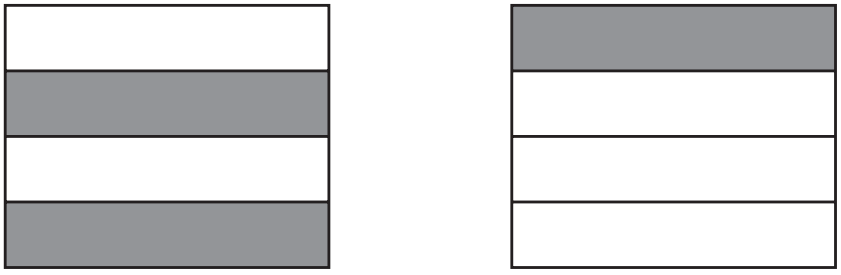
Ⓓ 64 cm

22 A park was visited by 356 adults and 598 children last week. What was the total number of adults and children who visited the park last week?

Record your answer in the space provided.

---

23 Each model shown is shaded to represent a different fraction.



Which comparison of the two fractions is true?

Ⓐ $\frac{2}{4} = \frac{3}{4}$

Ⓑ $\frac{2}{4} > \frac{1}{4}$

Ⓒ $\frac{2}{4} > \frac{3}{4}$

Ⓓ $\frac{2}{4} < \frac{1}{4}$

24 A librarian needs to place a total of 36 new books on 4 shelves. The same number of books will be on each shelf.

How many books should the librarian put on each shelf?

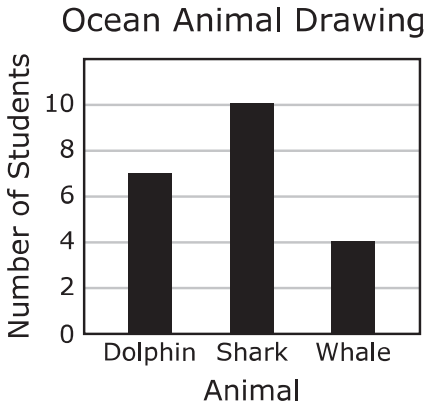
Ⓐ 3

Ⓑ 9

Ⓒ 4

Ⓓ 8

25 Each student in a class drew an ocean animal. The bar graph shows how many students drew each animal.



Complete the table so that it represents the data in the bar graph.

Select the correct answer for each box. Each answer may be used more than once. Not all answers will be used.

A 1 **B** 2 **C** 3 **D** 4 **E** 5 **F** 6 **G** 7 **H** 8 **I** 9 **J** 10

Ocean Animal Drawings

Animal	Number of Students
Dolphin	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ
Shark	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ
Whale	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

26 The table shows the number of people traveling on a ferry on each of four days.

People on Ferry

Day	Number of People
Friday	1,298
Saturday	1,309
Sunday	1,290
Monday	1,398

Which comparison of the daily numbers of people traveling on the ferry is true?

Ⓐ Saturday's number of people > Sunday's number of people

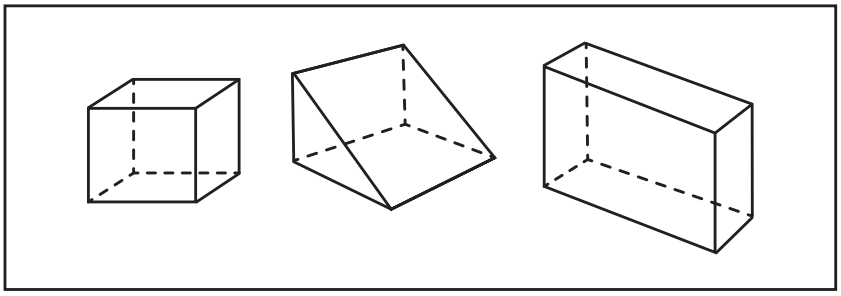
Ⓑ Friday's number of people = Monday's number of people

Ⓒ Monday's number of people < Sunday's number of people

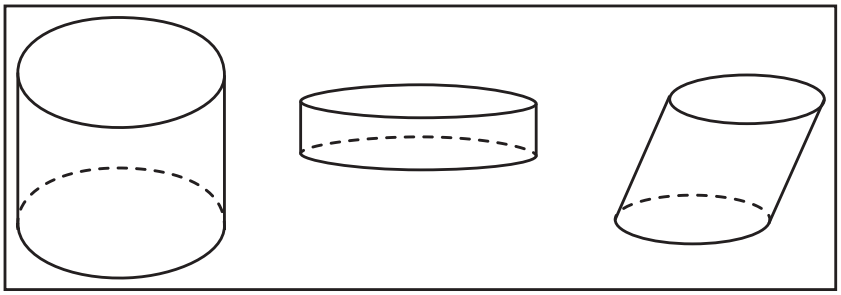
Ⓓ Sunday's number of people > Friday's number of people

27 Two groups of shapes are shown.

Group 1



Group 2



Which statement is true?

Ⓐ All the shapes in Group 1 are rectangular prisms.

Ⓑ All the shapes in Group 1 are polygons.

Ⓒ All the shapes in Group 2 are spheres.

Ⓓ All the shapes in Group 2 are cylinders.

28 Which expression shows an expanded form of the number 92,060?

Ⓐ (9 × 1,000) + (2 × 1,000) + (6 × 100)

Ⓑ (9 × 10,000) + (2 × 100) + (6 × 10)

Ⓒ (9 × 10,000) + (2 × 1,000) + (6 × 10)

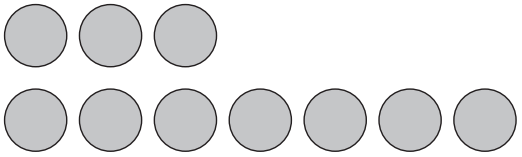
Ⓓ (9 × 1,000) + (2 × 100) + (6 × 10)

---

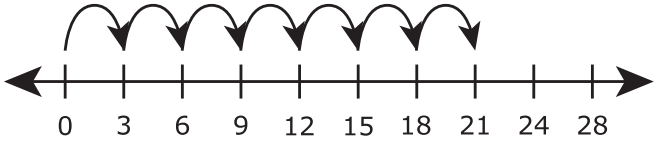
29 Which method can be used to solve the equation shown?

$$3 \times 7 = \square$$

Ⓐ 7 × 7 × 7

Ⓑ 

Ⓒ 7 10 13 16 19 22 25 28

Ⓓ 

30 Which numbers are odd numbers?

Select **TWO** correct answers.

- ◯ 54
- ◯ 65
- ◯ 82
- ◯ 36
- ◯ 93

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS IN THE TEST BOOKLET.

STAAR
GRADE 3
Mathematics
PRACTICE