



State of Texas Assessments of Academic Readiness

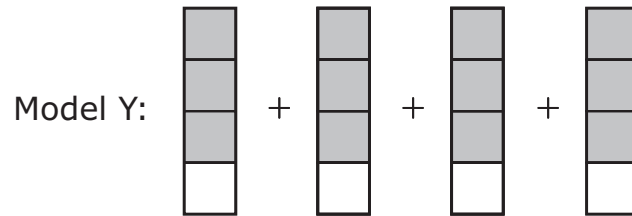
GRADE 4 Mathematics

Paper Item Sampler

1 The model is shaded to represent one whole.



Model Y is shaded to represent a number greater than 1.



Write an expression that represents Model Y.

Record your answers in the spaces provided.

| | | | | | | |
|-------|---|-------|---|-------|---|-------|
| _____ | + | _____ | + | _____ | + | _____ |
|-------|---|-------|---|-------|---|-------|

- 2** On Monday, $\frac{5}{12}$ of the students in Jorge's class rode the bus to school and $\frac{4}{12}$ walked to school.

What fraction of the students in Jorge's class either rode the bus or walked to school on Monday?

Record your answer in the space provided.

- 3** Ms. Wilmeth bought 4 bags of candy. Each bag contained 8 pieces of candy. She put an equal number of all the pieces into each of 9 gift boxes.

How many pieces of candy were left over?

Record your answer in the space provided.

- 4** The owners of a business rented 4,506.23 square feet of space in an office building. They plan to use 281.6 square feet of the space for the kitchen.

How many square feet of space is left?

Record your answer in the space provided.

5 Two figures are shown.

Figure 1

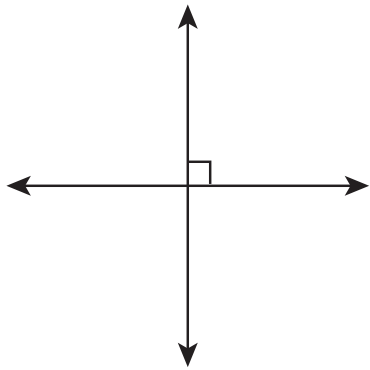
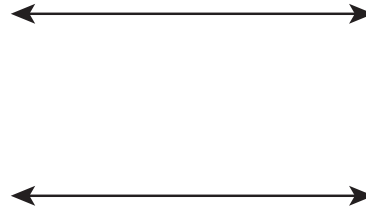


Figure 2



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

Figure 1 shows

| |
|---|
| <input type="radio"/> (A) rays |
| <input type="radio"/> (B) lines |
| <input type="radio"/> (C) line segments |

 that are

| |
|---|
| <input type="radio"/> (A) parallel |
| <input type="radio"/> (B) perpendicular |

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Figure 2 shows

| |
|---|
| <input type="radio"/> (A) rays |
| <input type="radio"/> (B) lines |
| <input type="radio"/> (C) line segments |

 that are

| |
|---|
| <input type="radio"/> (A) parallel |
| <input type="radio"/> (B) perpendicular |

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6 Greg sorted his collection of baseball cards:

- He will give $\frac{1}{5}$ of his collection to his brother.
- He will sell $\frac{4}{10}$ of his collection to a card shop.

How much of his collection of baseball cards will Greg have left?

Select **ONE** correct answer to complete the sentence.

Greg will have

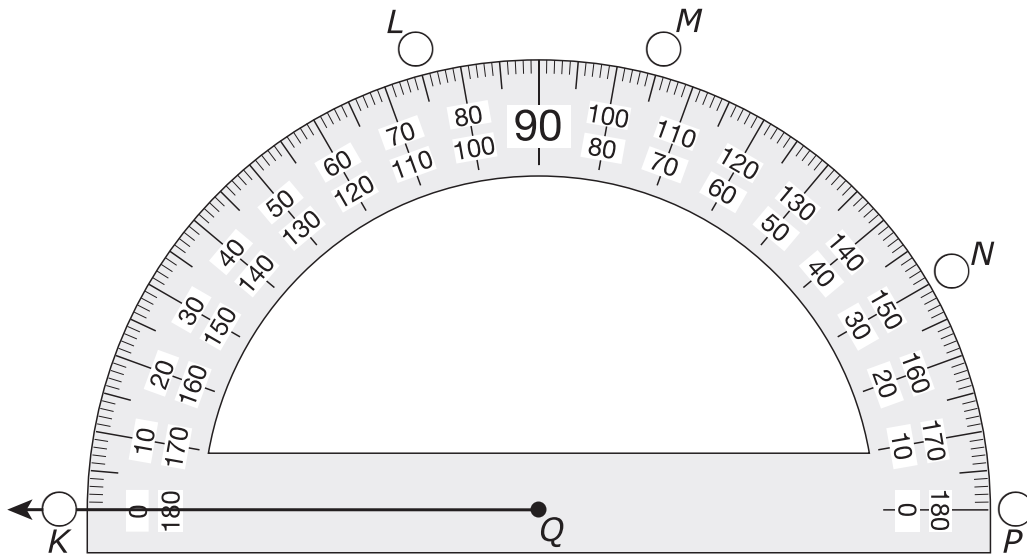
| |
|--------------------|
| (A) exactly half |
| (B) less than half |
| (C) more than half |

 of his collection left.

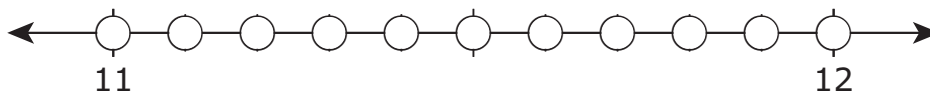
- 7 An angle with a measure of 75° can be created by using the protractor. Ray QK is drawn on the protractor as shown.

Which point should be connected to point Q to create a ray that completes the 75° angle?

Select **ONE** correct answer.



-
- 8 Which point on the number line represents the location of 11.6?
Shade the **ONE** correct circle that represents the point.



- 9 In a bag of balloons, $\frac{2}{8}$ of the balloons are red and $\frac{5}{8}$ of the balloons are blue.

What fraction of the balloons in the bag are either red or blue?

Complete the model so that it is shaded to represent the fraction of the balloons that are either red or blue.

Shade the sections you want to shade. Sections should be fully shaded.

Red and Blue Balloons

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10 The list gives information about the favorite color of each of 22 students.

- 6 students chose red.
- 2 students chose yellow.
- 5 more students chose blue than yellow.
- 3 fewer students chose purple than red.
- The rest of the students chose green.

Use tally marks to create a frequency table that represents the number of students who chose each color.

Write in the correct number of tally marks in each row.

Favorite Color

| Color | Number of Students |
|--------|--------------------|
| Red | |
| Yellow | |
| Blue | |
| Purple | |
| Green | |

- 11** The rule $+ 2$ is used to represent the relationship between the input and output of a number pattern.

Complete the table to represent the relationship with the rule $+ 2$.

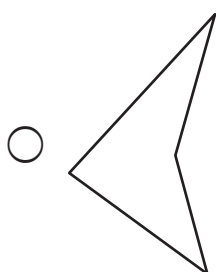
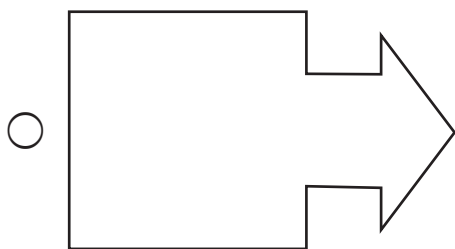
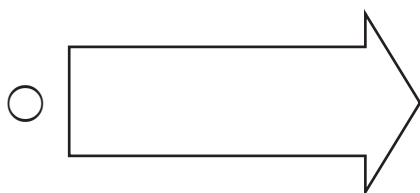
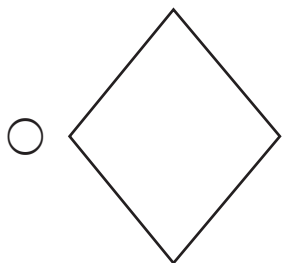
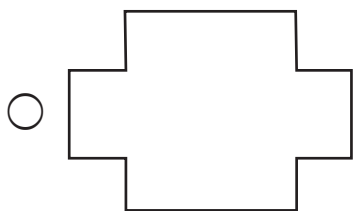
Select the correct answer for each box. Each answer may be used more than once. Not all answers will be used.

A 2 **B** 3 **C** 6 **D** 7 **E** 12 **F** 15 **G** 18

| Input | Output |
|-----------------------------|-----------------------------|
| 1 | (A) (B) (C) (D) (E) (F) (G) |
| 2 | 4 |
| 5 | (A) (B) (C) (D) (E) (F) (G) |
| 10 | (A) (B) (C) (D) (E) (F) (G) |
| (A) (B) (C) (D) (E) (F) (G) | 20 |

12 Which figures appear to have 2 or more lines of symmetry?

Select **TWO** correct answers.



13 Which comparisons are true?

Select **TWO** correct answers.

$\frac{2}{4} > \frac{4}{8}$

$\frac{1}{2} < \frac{3}{4}$

$\frac{1}{3} > \frac{1}{4}$

$\frac{3}{6} < \frac{3}{8}$

$\frac{2}{8} > \frac{1}{4}$

**STAAR
GRADE 4
Mathematics
Paper Item Sampler**

