Teacher Guide

Sample Items

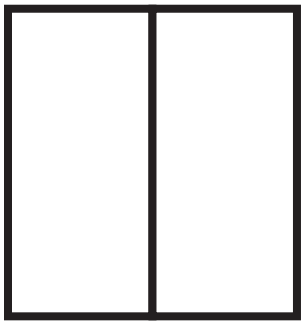
Mathematics

Grades 3–5

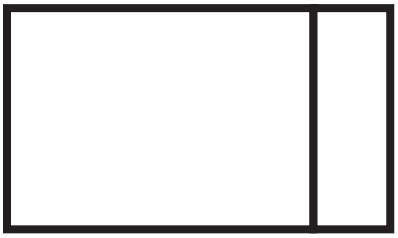
Mathematics Grade 3

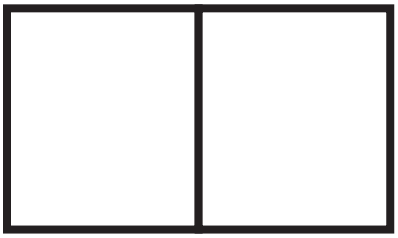
Item 1

This rectangle was divided into two equal parts. Each part is the same shape and size.



Which rectangle has also been divided into two equal parts?

O 

O 

Item 2

There were 19 chairs in a classroom. The teacher put 7 chairs in the hallway.

Which equation shows how many chairs were still in the classroom?

- o 19 – 7 = 12
- o 19 – 2 = 17
- o 19 + 7 = 26

Item 3

Lightbulbs are sold in packages. This data table shows the total number of lightbulbs in different numbers of packages.

Lightbulbs

Number of packages	Total number of lightbulbs
1	4
2	8
3	12
4	?

What is the total number of lightbulbs in 4 packages?

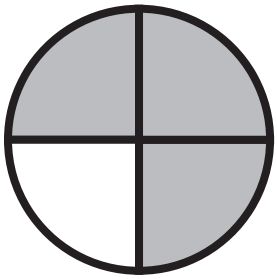
O 13

O 14

O 16

Item 4

This fraction circle is divided into equal parts. Some parts are shaded.



What part of the fraction circle is shaded?

o $\frac{1}{4}$

o $\frac{1}{3}$

o $\frac{3}{4}$

Item 5

This data table shows how six students voted for their favorite after-school activity.

Favorite After-School Activity

Activity	Number of votes
Biking	3
Drawing	1
Reading	2

This incomplete picture graph can be used to show the same information as the data table.

Favorite After-School Activity

Activity	Number of votes
Biking	
Drawing	
Reading	

The data table shows that 3 students voted for biking as their favorite after-school activity.

The picture graph also shows that 3 students voted for biking as their favorite after-school activity.

The data table shows that 1 student voted for drawing as his favorite after-school activity.

The row labeled “Drawing” in the picture graph needs 1 crayon tile.

Use the book tiles to show how many students voted for reading as their favorite after-school activity. You may not need all of the tiles.

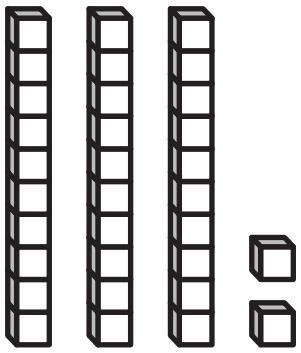
O The student provided the correct answer.

O The student did not provide the correct answer.

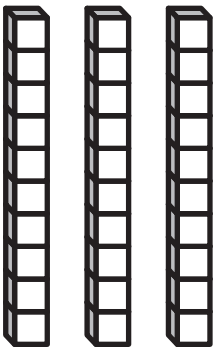
Mathematics Grade 4

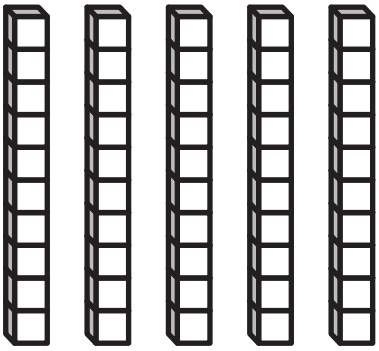
Item 1

This model shows the number 32.



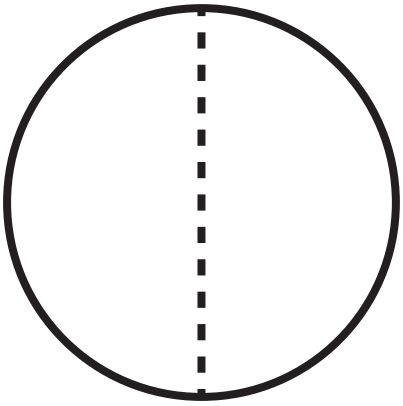
Which model is closer to the number 32?

O 

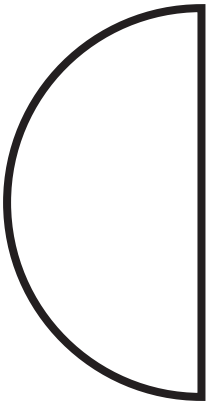
O 

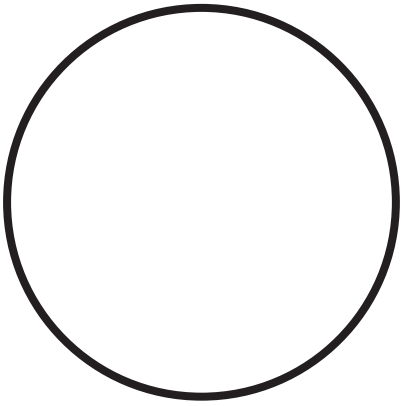
Item 2

This is a whole circle divided into two equal parts.



Which picture shows part of the circle?

O 

O 

Item 3

Sabrina had 27 beads.

Sabrina put the beads into 3 equal groups.

How many beads did Sabrina put into each group?

O 4 beads

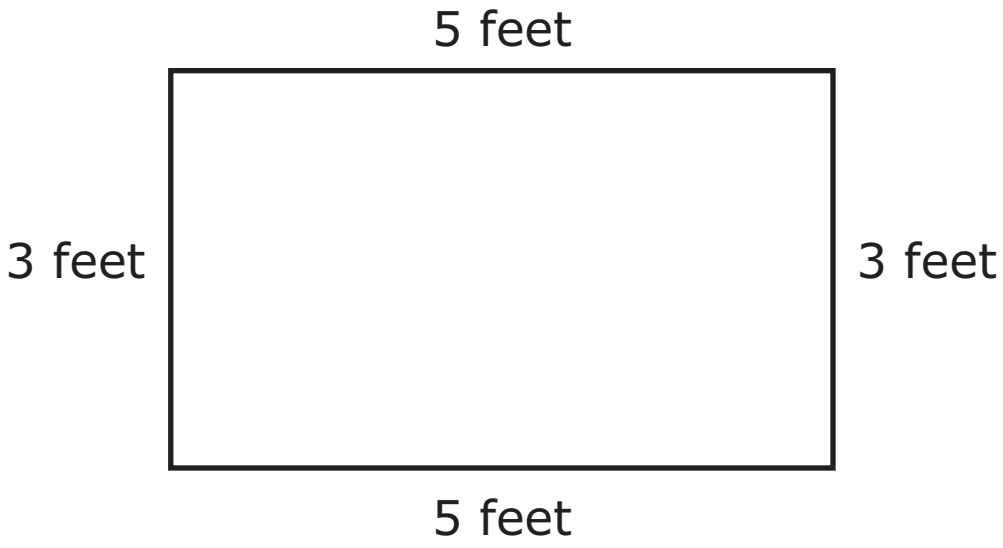
O 9 beads

O 14 beads

Item 4

Perimeter is the distance around a shape.

Alisha had a poster shaped like this rectangle with a length of 5 feet and a width of 3 feet.



What was the perimeter of Alisha's poster in feet?

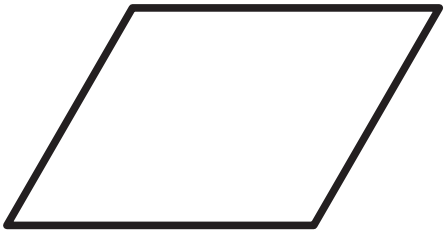
O 8 feet

O 15 feet

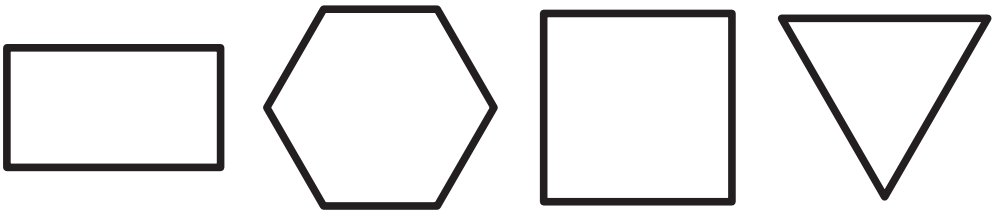
O 16 feet

Item 5

This is a parallelogram. It has 4 angles.



Here are more shapes.



This incomplete chart is for shapes with 4 angles.

Shapes with 4 angles

Look at the number of angles each shape has. Select the shape or shapes with 4 angles and place them onto the chart.

O The student provided the correct answer.

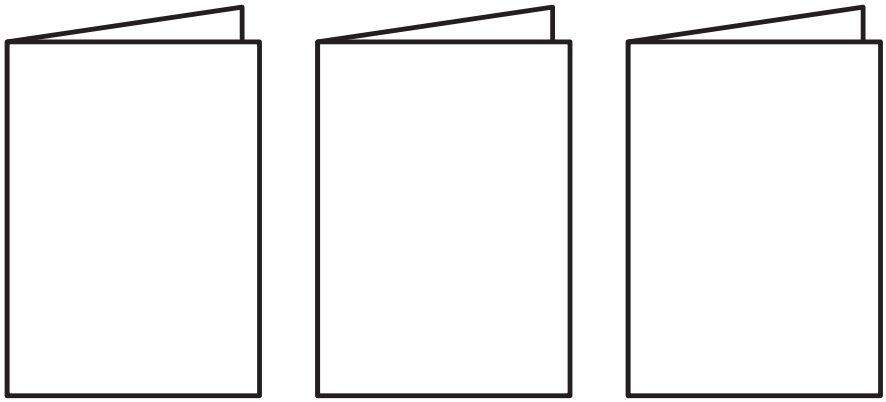
O The student did not provide the correct answer.

Mathematics Grade 5

Item 1

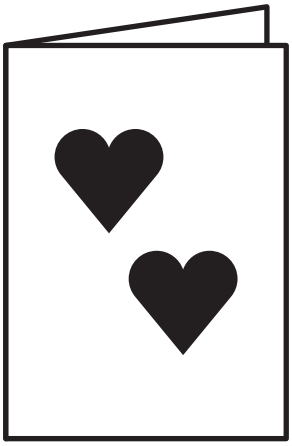
Ella had 6 hearts.

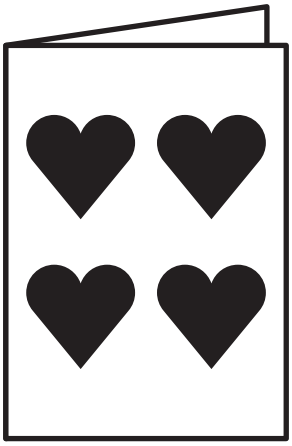
Ella had 3 cards.



Ella put the same number of hearts onto each card.

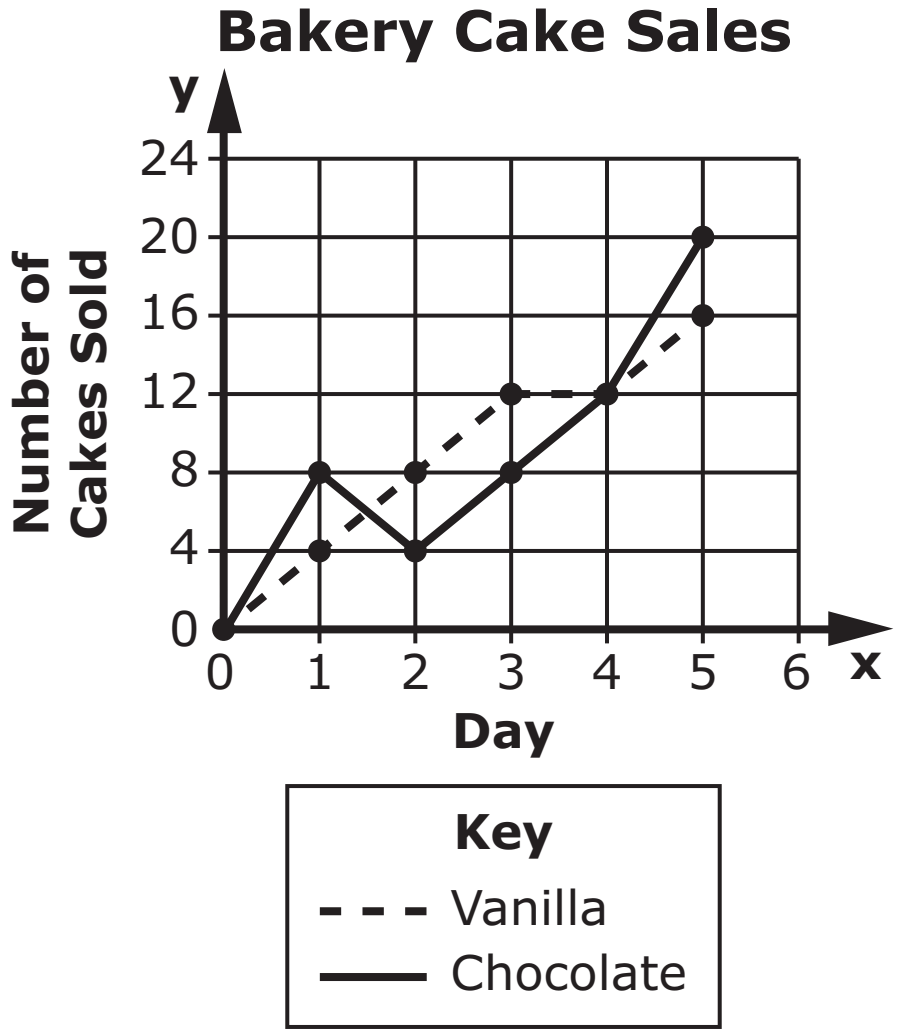
Which picture shows the number of hearts Ella put onto each card?

O 

O 

Item 2

This graph shows the number of vanilla and chocolate cakes sold at a bakery over 5 days.



On which day were the number of cakes sold equal?

O Day 2

O Day 4

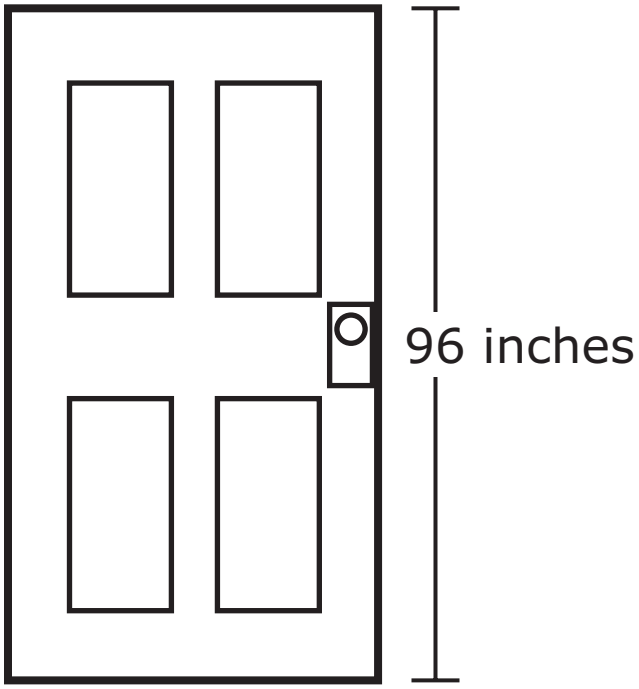
O Day 7

Item 3

There are 12 inches in 1 foot.

$$12 \text{ inches} = 1 \text{ foot}$$

This door has a height of 96 inches.



What is the height of this door in feet?

O 7 feet

O 8 feet

O 9 feet

Item 4

Marta had 7 squares. Each square had a height of $\frac{3}{8}$ of an inch.

This picture shows how Marta glued all of her squares together.

What was the height of all 7 squares, in inches, after Marta glued them together?

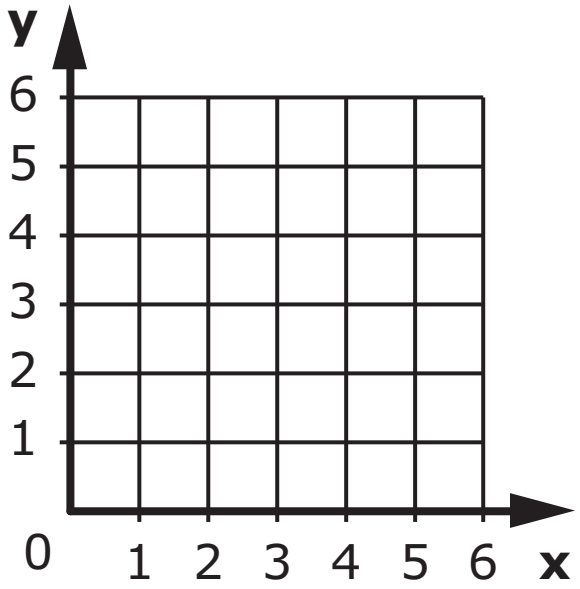
O $\frac{21}{8}$ inches

O $\frac{39}{8}$ inches

O $\frac{59}{8}$ inches

Item 5

This is a coordinate grid and a small object.



This is an ordered pair.

$(3, 4)$

Use the small object to plot the point $(3, 4)$ on the coordinate grid.

O The student provided the correct answer.

O The student did not provide the correct answer.

msaa
Multi-State Alternate Assessment