

Name \_\_\_\_\_

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## Grade 3: Module 8 - Fractions

## Part 1

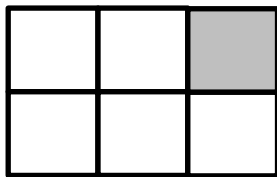
1. A circle is divided into 6 parts. Each part is  $\frac{1}{6}$  of the total area of the circle.

Which sentence describes the circle?

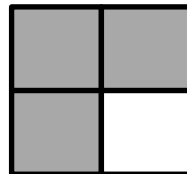
- A. The circle has 1 small part and 5 large parts.
- B. The circle has 1 small part and 6 large parts.
- C. The circle has 5 parts that are each the same size.
- D. The circle has 6 parts that are each the same size.

2. Which figure is  $\frac{1}{4}$  shaded?

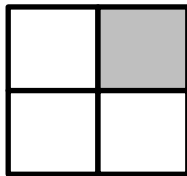
A.



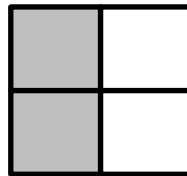
B.



C.



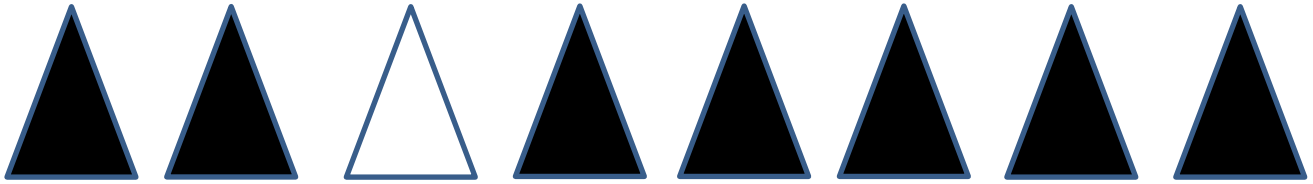
D.



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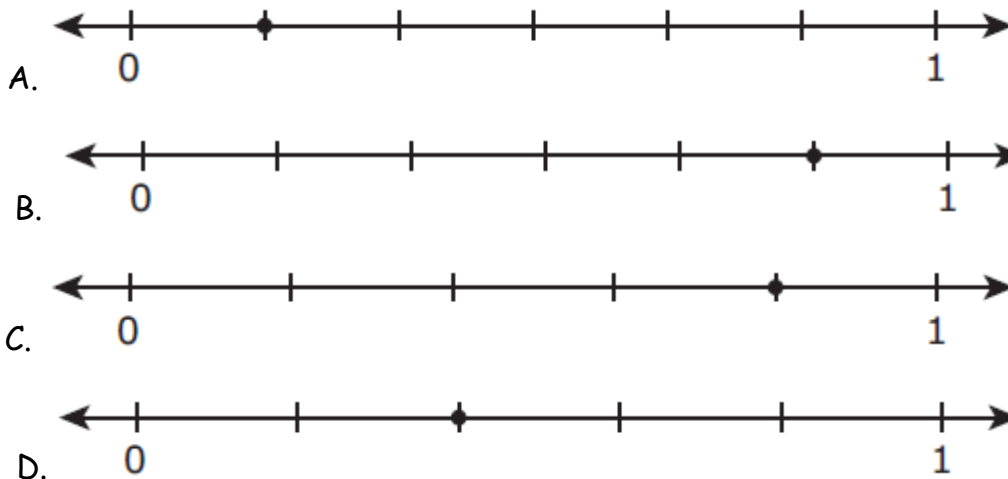
3. There are eight triangles in the diagram below.



What fraction of the total number of triangles is shaded white?

- A.  $\frac{1}{8}$
- B.  $\frac{2}{8}$
- C.  $\frac{5}{8}$
- D.  $\frac{7}{8}$

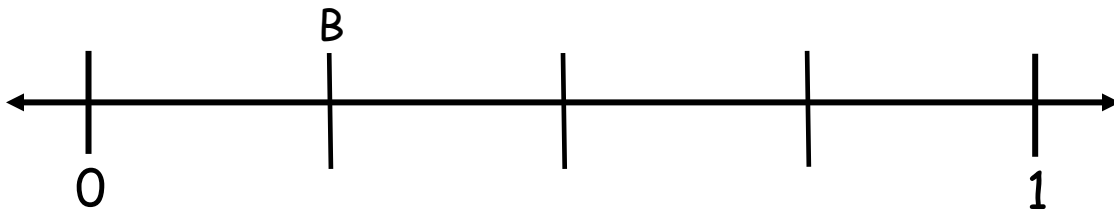
4. Which number line shows a point at  $\frac{1}{6}$  ?



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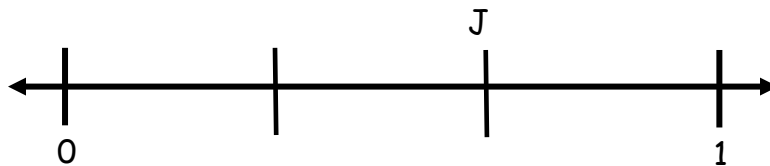
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5. What point is represented by B on the number line below?



- A.  $\frac{1}{8}$
- B.  $\frac{1}{6}$
- C.  $\frac{1}{4}$
- D.  $\frac{1}{5}$

6. Which fraction represents the location of point J on the number line below?



- A.  $\frac{1}{4}$
- B.  $\frac{1}{3}$
- C.  $\frac{2}{4}$
- D.  $\frac{2}{3}$

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7. Which two fractions both represent the same location on a number line?

A.  $\frac{2}{3}, \frac{4}{3}$

B.  $\frac{3}{4}, \frac{6}{8}$

C.  $\frac{2}{4}, \frac{4}{2}$

D.  $\frac{5}{6}, \frac{5}{8}$

8. Which two fractions both represent the same location on a number line?

A.  $\frac{1}{2}, \frac{5}{4}$

B.  $\frac{3}{4}, \frac{3}{8}$

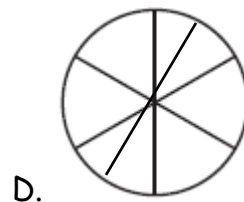
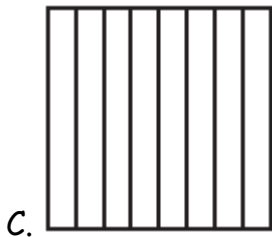
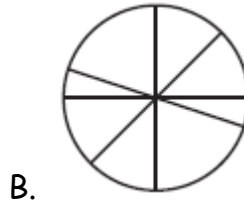
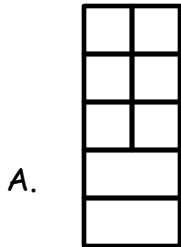
C.  $\frac{1}{2}, \frac{4}{8}$

D.  $\frac{6}{8}, \frac{6}{12}$

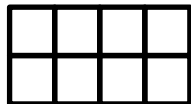
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9. Tianna draws a geometric shape. She divided the shape into 8 equal parts. Each part is  $\frac{1}{8}$  the area of the shape. Which shape could Tianna have drawn?



10. How much of the area of the rectangle is each square?

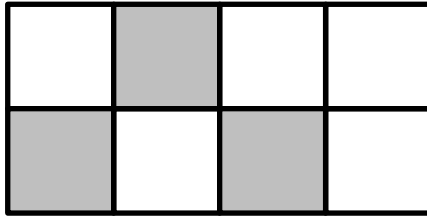


- A.  $\frac{1}{4}$  of the area  
 B.  $\frac{1}{8}$  of the area  
 C. 4 times the area  
 D. 8 times the area

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11. What fraction of the shape shown below is shaded ?



- A.  $\frac{3}{8}$
- B.  $\frac{3}{6}$
- C.  $\frac{5}{8}$
- D.  $\frac{8}{8}$

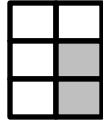
12. Terry says that all the fractions in the choices below are equivalent to  $\frac{1}{2}$ .Which of the following values is **not** equal to  $\frac{1}{2}$ ?

- A.  $\frac{2}{4}$
- B.  $\frac{3}{8}$
- C.  $\frac{3}{6}$
- D.  $\frac{4}{8}$

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13. What fraction represents the shaded part of the figure below?



- A.  $\frac{2}{4}$
- B.  $\frac{2}{8}$
- C.  $\frac{2}{6}$
- D.  $\frac{4}{6}$

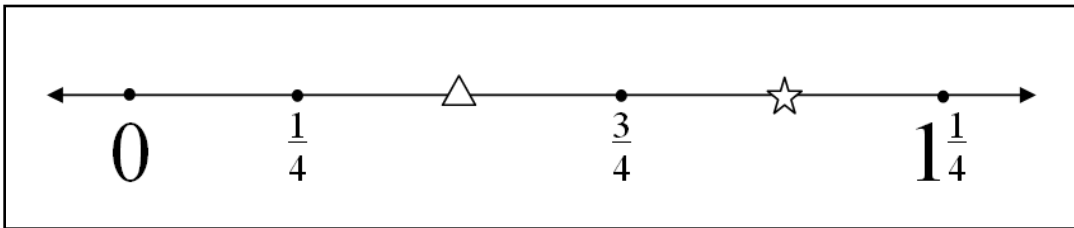
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## Part 2

14.

## Placing Fractions



Stephanie and Riley are working on a math problem.

- Riley said that the value of the star on this number line is  $\frac{4}{4}$ .
- Stephanie said that the value of the star is 1.
- Who is correct?

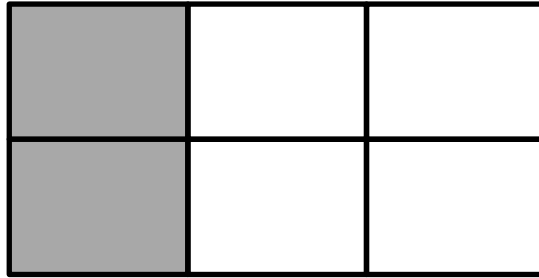
Show your work.

Answer \_\_\_\_\_

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15. A pizza is cut into six equal pieces. Thomas eats 2 of the pieces.



Write a fraction that represents the amount of the pizza that has been eaten. \_\_\_\_\_

Write a fraction for the amount that is left. \_\_\_\_\_

Explain how you found your answer.

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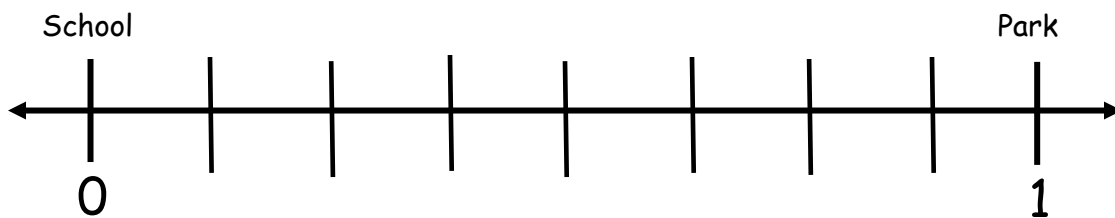
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## Part 3

16. James and Daria live on a road between the school and the park. The school and the park are 1 mile apart. The road is represented by the number line below.



- James lives  $\frac{2}{8}$  of a mile from the school.
- Daria lives  $\frac{3}{8}$  of a mile from James' house.

Draw and label points for James' house and Daria's house on the number line. Use labels J for James and D for Daria.

How far does Daria live from the school?

*Answer* \_\_\_\_\_ miles

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Answer Key for Grade 3 Module 8 Assessment - Form A			
Question Number	Standard	Answer	Reasons for Answers
1	3.NF.A.1	D	A. Chose 1 small part because the numerator of the fraction was 1 and subtracted the 6 and 1 of the fraction to determine the 5 large parts B. Used the 1 and 6 from the fraction for the small and large parts of the circle C. Subtracted the numerator from the denominator to determine the parts of the circle
2	3.NF.A.1	C	A. Miscalculated the number of sections as 6 instead of 4 B. Counted the unshaded sections instead of the shaded sections D. Identified 2 fourths instead of one fourth shaded
3	3.NF.A.1	A	B. The fraction of triangles before the white triangle C. The fraction of triangles after the white triangle D. The fraction of triangles that were not white
4	3.NF.A.2a	A	B. Chose the point that was one sixth space away from 1 C. Chose the point that was one space away from 1 D. Miscalculated the sections in the number line
5	3.NF.A.2a	C	A. Chose an answer with a numerator of one (knew that it was a unit fraction) B. Chose an answer with a numerator of one (knew that it was a unit fraction) D. Chose an answer with a numerator of one (knew that it was a unit fraction)
6	3.NF.A.2b	D	A. Counted the tick marks and chose a fraction with a denominator of 4 B. Counted the sections between 0 and 1 and chose a fraction with a denominator of 3 C. Counted the tick marks and chose a fraction with a denominator of 4
7	3.NF.A.3a	B	A. Thought that the sum of the numerators and the sum of the denominators were equal so that the two fractions represent the same location C. Multiplied the two fractions together and since the product was 1, thought that they were equivalent D. Thought that the two fractions were equivalent because they had the same numerator
8	3.NF.A.3a	C	A. Thought that the sum of the numerators and the sum of the denominators were equal so that the two fractions represent the same location B. Thought that the two fractions were equivalent because they had the same numerator D. Thought that the two fractions were equivalent because they had the same numerator

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9	3.G.A.2	C	A. The shape has 8 parts B. The shape has 8 parts D. The shape has 8 parts
10	3.G.A.2	B	A. Chose one fourth because a square has 4 sides C. Chose because a square has 4 sides D. Chose because there are 8 squares that make up the rectangle
11	3.NF.A.1	A	B. Miscalculated a total of 6 sections C. The number of sections that are not shaded D. The total number of sections in the figure
12	3.NF.A.3b	B	A. Did not understand two fourths was equivalent to one half C. Did not understand three sixths was equivalent to one half D. Did not understand four eighths was equivalent to one half
13	3.G.A.2	C	A. Chose because two sections are shaded and four are not B. Chose because two sections are shaded and then added those two to the 6 sections in the original figure ( $2 + 6 = 8$ ) D. The section of the rectangle that is not shaded
14	3.NF.A.3c	See below	
Both Stephanie and Riley are correct			$\frac{4}{4}$ is equivalent to 1
15	3.NF.A.1	See below	
$\frac{2}{6}$ of the pizza has been eaten. ( 2 out of 6 pieces)			$\frac{4}{6}$ of the pizza is left (4 out of 6 pieces are left)
I counted the total shaded sections and wrote that as the numerator of a fraction with the denominator as the total number of pieces. This fraction represents the fraction of the pizza eaten.			
I counted the total unshaded sections and wrote that as the numerator of a fraction with the denominator as the total number of pieces. This fraction represents the fraction of the pizza that is left.			
16	3.NF.A.2b	See below	
Daria lives $\frac{5}{8}$ mile from the school.			