Partitioning Shapes Worksheet

Grade 3 · Common Core 3.G.A.2

> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

Practice

Builds the skill step by step.

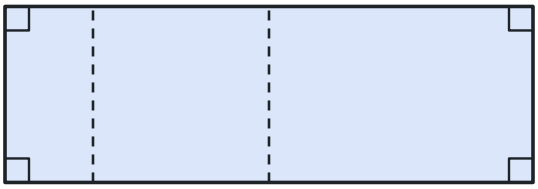
1. The rectangle is split into equal parts. What fraction of the whole is the shaded part?



2. The rectangle is split into equal parts. What fraction of the whole is the shaded part?



3. Are the parts of this rectangle equal?



A. Yes. The parts are all the same height.

B. Yes. There are 3 parts.

C. No. The parts are different sizes.

D. Yes. Any shape with lines has equal parts.

4. The rectangle is split into equal parts. What fraction of the whole is the shaded part?



5. A square is cut into 2 equal parts. What fraction of the square's area is each part?

6. The rectangle is split into equal parts. What fraction of the whole is the shaded part?



7. A rectangle is split into 4 equal parts. What fraction of the area is each part?

   A. $\frac{4}{1}$

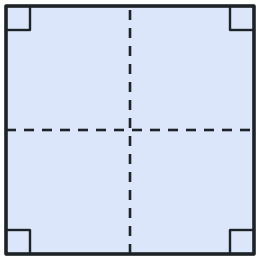
   B. $\frac{1}{2}$

   C. $\frac{1}{4}$

   D. $\frac{1}{3}$

8. Into how many equal parts should you split a shape to show sixths?

9. The square is split by the dashed lines into equal parts. What fraction of the square is each part?



10. A shape is split into 3 equal parts. What is each part called?

    A. one half

    B. one third

    C. three

    D. one fourth

ALBERT

Name _____ Date _____

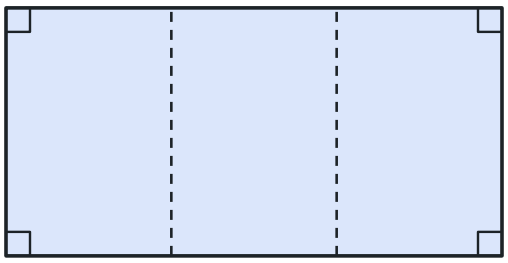
Partitioning Shapes Worksheet

Grade 3 · Common Core 3.G.A.2

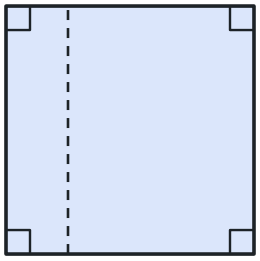
On Level

Grade-level practice.

1. The rectangle is split by the dashed lines into equal parts. What fraction of the whole is each part?



2. Kai says each part of this square is $\frac{1}{2}$. Is he right?



A. No. The parts are not the same size, so neither part is $\frac{1}{2}$.

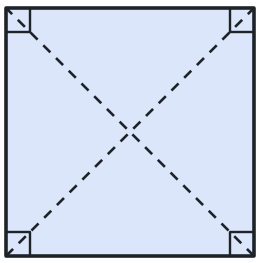
B. Yes. There are 2 parts, so each is $\frac{1}{2}$.

C. Yes. Both parts are rectangles.

D. No. Each part is $\frac{1}{4}$.

3. A garden is split into 8 equal plots. What fraction of the garden's area is one plot?

4. Two dashed lines go from corner to corner across the square, making 4 equal triangles. What fraction of the square is each triangle?



5. A square is cut with one straight line from one corner to the opposite corner. What fraction of the square is each triangle?

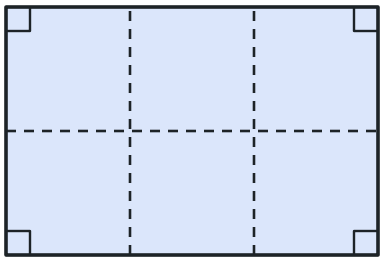
   A. $\frac{2}{1}$

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

   C. $\frac{1}{2}$

   D. $\frac{1}{3}$

6. The rectangle is split by the dashed lines into equal parts. What fraction of the whole is each part?



7. Which shows a rectangle split into fourths?

   A. 4 parts that are all the same size

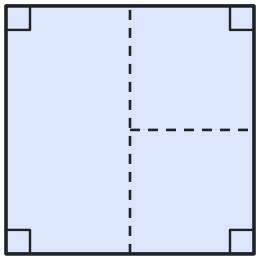
   B. 4 parts of different sizes

   C. 2 parts that are the same size

   D. 3 parts that are the same size

8. Each part of a shape is $\frac{1}{3}$ of the whole. How many equal parts is the shape split into?

9. The square is split into three parts by the dashed lines. What fraction of the whole square is the smallest part?



10. Two pizzas are the same size. One is cut into 4 equal slices. The other is cut into 8 equal slices. Which slice is bigger?

    A. A slice from the pizza cut into 8

    B. A slice from the pizza cut into 4

    C. They are the same size

    D. You can't tell

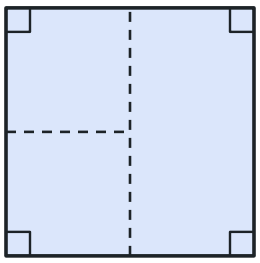
Partitioning Shapes Worksheet

Grade 3 · Common Core 3.G.A.2

Challenge

Multi-step and word problems that stretch it.

1. The square is split into parts by the dashed lines. What fraction of the whole square is the right part?



2. Ella splits a rectangle into 4 parts. Two parts are small squares and two are long, thin strips, but all four parts have the same area. Is each part $\frac{1}{4}$ of the rectangle?

   A. Yes, because there are 4 parts of any size.

   B. No, because there are two kinds of parts.

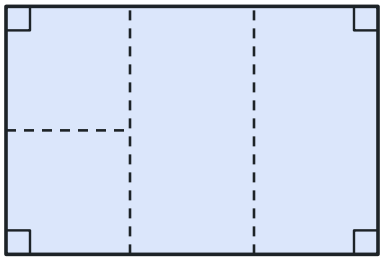
   C. No, because the parts must be the same shape.

   D. Yes, because all four parts have the same area.

3. A rectangle has an area of 24 square units. It is split into 6 equal parts. What is the area of each part?

4. A rectangle has an area of 24 square units. It is split into 4 equal parts. What fraction of the whole is each part?

5. Are all four parts of this rectangle the same area?



A. Yes. There are 4 parts.

B. No. Two parts have an area of 4 square units and two have an area of 8.

C. Yes. All the parts are 2 units wide.

D. No. Every part has a different area.

6. A square has an area of 16 square units. One part of it is $\frac{1}{4}$ of the square. What is the area of that part?

7. A shape is split into equal parts. Each part has an area of 3 square units, and the whole shape has an area of 18 square units. What fraction of the whole is each part?

8. The same rectangle is split into thirds one time and into sixths another time. Which part is bigger?

   A. One sixth, because 6 is greater than 3

   B. They are the same size

   C. You can't tell

   D. One third, because the rectangle is split into fewer parts

9. A rectangle made of 8 unit squares is split into 4 equal parts. How many unit squares are in each part?

10. Jon cuts a sandwich into 4 pieces: 2 big pieces and 2 small pieces. He says each piece is $\frac{1}{4}$ of the sandwich. Why is he wrong?

    A. The pieces aren't equal, so they aren't fourths.

    B. There should be 3 pieces.

    C. $\frac{1}{4}$ means 4 big pieces and 4 small pieces.

    D. He is not wrong.