

# Grade 3 · Quadrilaterals and Partitioning Shapes · Test

Common Core 3.G.A.1, 3.G.A.2 · mathovore.fr

Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Score: \_\_\_\_\_

This test has 8 questions worth 20 points. It covers naming and sorting quadrilaterals by their attributes and cutting shapes into parts with equal areas. Work in order, show your thinking, and write units where they are needed. You have 45 minutes.

## Test information

- **Grade:** Grade 3
- **Chapter:** Quadrilaterals and Partitioning Shapes
- **Common Core:** 3.G.A.1, 3.G.A.2
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 3 pts; Question 3: 2 pts; Question 4: 3 pts; Question 5: 2 pts; Question 6: 3 pts; Question 7: 2 pts; Question 8: 3 pts)

## Question 1: Find the quadrilaterals (2 points)

Look at shapes A to E.



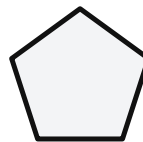
**A**



**B**



**C**



**D**



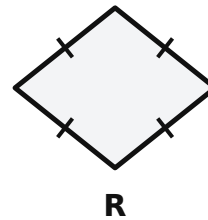
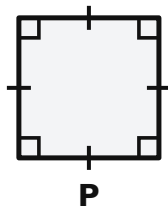
**E**

Shapes A to E.

- Write the letters of all the quadrilaterals. (1 point)
- How many sides do shapes B and D have? (1 point)

## Question 2: Name the shapes (3 points)

Tick marks show equal sides. Small squares show right angles. Write the most exact name for each shape.



Shapes P, Q and R.

- Shape P (1 point)
- Shape Q (1 point)
- Shape R (1 point)

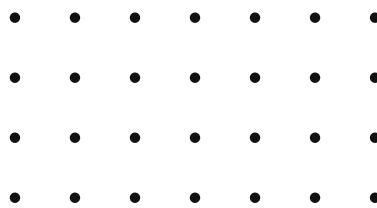
### Question 3: True or false (2 points)

Write true or false. Then explain your answer in one sentence.

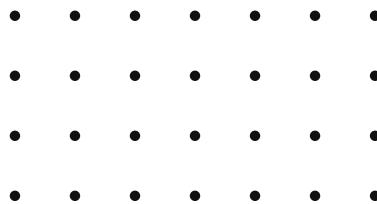
- Every square is a rhombus. (1 point)
- Every rectangle is a square. (1 point)

### Question 4: Draw quadrilaterals (3 points)

Use the dot grids to draw. Connect dots with straight lines.



Grid for part (a).



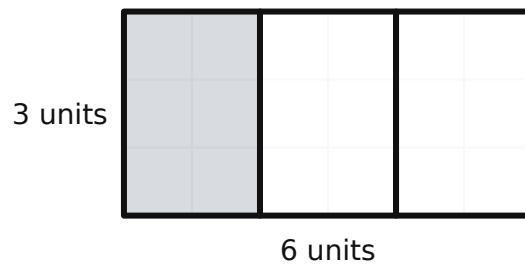
Grid for part (b).

- Draw a rectangle that is not a square. (1 point)
- Draw a quadrilateral that is not a rhombus, a rectangle or a square. (1 point)
- Explain why your shape in part (b) is not a rhombus, a rectangle or a square. (1 point)

### Question 5: Equal parts (2 points)

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The rectangle has an area of 18 square units. It is cut into 3 parts with equal areas.



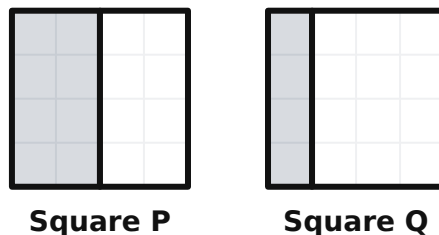
A rectangle of 18 square units.

- a. What fraction of the rectangle is each part? (1 point)
- b. What is the area of each part? (1 point)

### Question 6: Halves or not (3 points)

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Both squares have an area of 16 square units. Each is cut into two parts.



**Square P**

**Square Q**

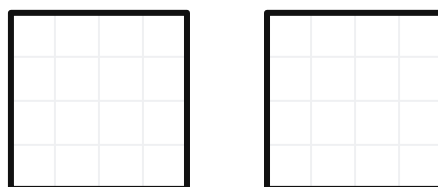
Squares P and Q.

- a. Which square is cut into halves? (1 point)
- b. Write the area of each part of Square Q. (1 point)
- c. Explain why the parts of Square Q are not halves. (1 point)

### Question 7: Two ways to cut (2 points)

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Draw two different ways to cut a square into 2 parts with equal areas. Use a new square for each way.



**Way 1**

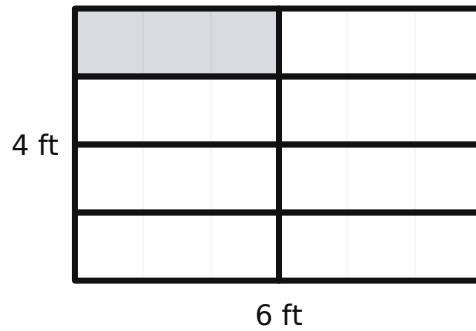
**Way 2**

Two squares for your drawings.

### Question 8: Ethan's garden bed (3 points)

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Ethan's rectangular garden bed is 6 feet long and 4 feet wide. He cuts it into 8 sections with equal areas.



The garden bed.

- What is the area of the whole bed? (1 point)
- What is the area of one section? (1 point)
- What fraction of the bed is one section? (1 point)