

Grade 3 - Quadrilaterals and Partitioning Shapes - Test

Common Core 3.G.A.1, 3.G.A.2 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This **quadrilaterals test** for 3rd Grade covers quadrilaterals and partitioning shapes (Common Core 3.G.A.1, 3.G.A.2), with a free PDF to print.

This test has 9 questions worth 20 points in all. Show your thinking when a question asks you to explain. Use a pencil and a ruler. You have 45 minutes.

Time and points

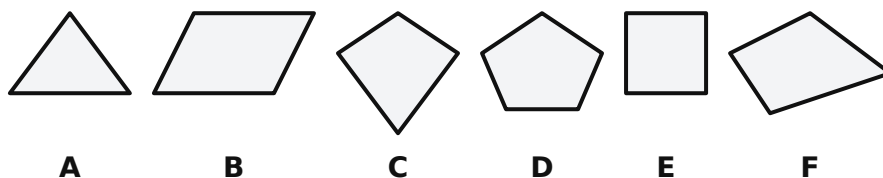
About this test

- Grade: Grade 3
- Chapter: Quadrilaterals and Partitioning Shapes
- Standards: 3.G.A.1, 3.G.A.2
- Time: 45 minutes
- Total: 20 points

Quadrilaterals test: questions

Question 1 - Which are quadrilaterals [2 pts]

Write the letters of all the quadrilaterals.



Six shapes labeled A to F: a triangle, a parallelogram, a kite, a pentagon, a square, and a four-sided shape with sides of different lengths

Question 2 - True or false [2 pts]

- a. Every square is a rhombus. (1 point)
- b. Every rectangle has 4 equal sides. (1 point)

Question 3 - Two mystery shapes [2 pts]

- a. I have 4 equal sides and no right angles. Name me. (1 point)
- b. I have 4 right angles and 2 pairs of equal sides, but my sides are not all equal. Name me. (1 point)

Question 4 - Sort the shapes [3 pts]

Shape	Is it a rectangle?	Is it a rhombus?
Square	?	?
A 7 by 3 rectangle	?	?
Rhombus with no right angles	?	?

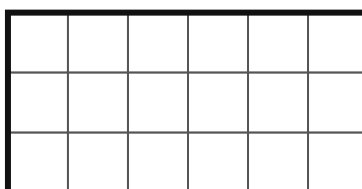
Write yes or no for each question mark. Then explain why a trapezoid is neither. (1 point for the explanation)

Question 5 - Draw a new quadrilateral [2 pts]

Draw a quadrilateral that is not a rhombus, not a rectangle, and not a square. Label the sides with lengths that show why.

Question 6 - Equal parts on a grid [2 pts]

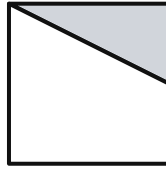
The rectangle is made of 18 equal squares. Draw lines to cut it into 3 parts with equal area. What fraction of the rectangle is one part?



A rectangle 6 grid units wide and 3 grid units tall drawn on a grid of equal squares, for cutting into 3 equal parts

Question 7 - The cut square [2 pts]

A square napkin with sides of 8 cm is cut by a straight line from one corner to the middle of the opposite side. Aisha says the shaded triangle is $\frac{1}{2}$ of the square because there are 2 parts. Is she right? Explain.



A square cut by a straight line from the top left corner to the middle of the right side into a shaded triangle and a four-sided piece

Question 8 - Corn bread tray [3 pts]

Ethan bakes a rectangular tray of corn bread and cuts it into 8 pieces with equal area.

- What fraction of the tray is one piece? (1 point)
- Ethan cuts a second tray of the same size into 4 pieces with equal area. Are those pieces bigger or smaller than the first ones? (1 point)
- Explain your answer to part b. (1 point)

Question 9 - Two cuts [2 pts]

A square is cut into 4 parts with equal area. Maya cuts hers into 4 small squares. Jamal cuts his into 4 triangles. Do both children have fourths? Explain.

Key facts behind this quadrilaterals test

Key facts

- A quadrilateral has exactly 4 straight sides and 4 corners.
- A rhombus has 4 equal sides; a rectangle has 4 right angles.
- A square is a rhombus and a rectangle at the same time.
- Some quadrilaterals are not rhombuses, rectangles, or squares.
- Equal parts have equal area, and each of n equal parts is $\frac{1}{n}$ of the whole.

How to use this quadrilaterals test

Time yourself: the test is designed for an average student in 45 minutes. Answer the questions

you are sure of first, then come back to the longer ones and check your units.