Classifying 2D Figures

Spot mistakes, reason, and work backward

Name _____ **Date** _____ **Score** _____ / 6

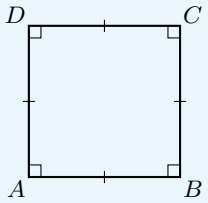
QUICK REVIEW

Classify using attributes, not the direction a shape faces. A rectangle has 4 right angles; a square has 4 right angles and 4 equal sides, so every square is a rectangle. A parallelogram has 2 pairs of parallel sides. Here trapezoid means exactly 1 parallel pair. A right triangle has one $90°$ angle; an acute triangle has three acute angles.

Worked example

Name this figure as specifically as possible and give its attributes.

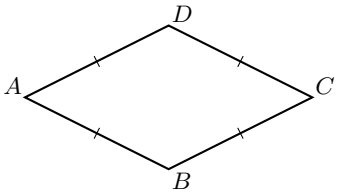
1. The figure has 4 sides, so it is a quadrilateral.
2. It has 2 pair(s) of opposite parallel sides and 4 right angles.
3. Four equal sides and four right angles make a square (also a rectangle and rhombus).
Answer: Square.



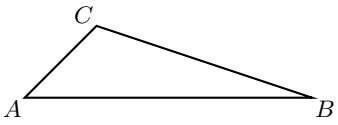
Practice Problems

Show your thinking.

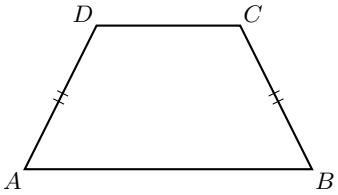
1. The four equal-side marks are given. Identify this non-right-angled quadrilateral.



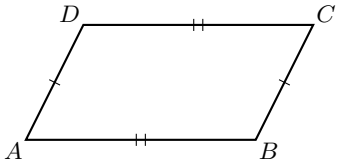
2. Use the angle openings to classify this triangle.



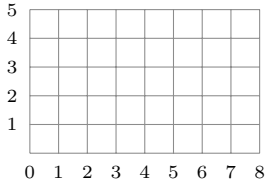
3. Find the quadrilateral family when exactly one opposite pair is parallel.



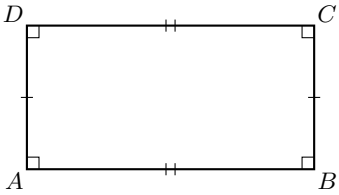
4. A student says every parallelogram has 4 right angles. Use this figure to correct the statement.



5. Draw a right triangle with perpendicular sides 4 and 3 grid units. Mark its right angle.



6. Is a non-square rectangle also a rhombus? Use this example.



Answer Key

1. Rhombus.
2. Obtuse triangle.
3. Trapezoid.
4. False; a parallelogram needs parallel opposite sides, not right angles.
5. A triangle with a horizontal 4-unit side and vertical 3-unit side sharing an endpoint.
6. No.

Step-by-Step Solutions

Follow each calculation, then check your own work.

Problem 1

1. The figure has 4 sides, so it is a quadrilateral.
2. It has 2 pair(s) of opposite parallel sides and 0 right angles.
3. Four equal side marks make a rhombus; the angles need not be right angles.

Problem 2

1. The figure has 3 straight sides, so it is a triangle.
2. It has 0 right angle(s) and 1 obtuse angle(s).
3. One angle is greater than $90°$, so this is an obtuse triangle.

Problem 3

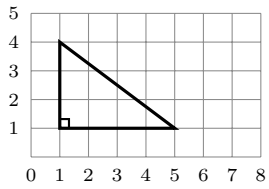
1. The figure has 4 sides, so it is a quadrilateral.
2. It has 1 pair(s) of opposite parallel sides and 0 right angles.
3. Exactly one pair of parallel sides makes a trapezoid under the definition used here.

Problem 4

1. The figure has 2 pairs of parallel opposite sides.
2. It has 0 right angles, so it is not a rectangle.
3. It still meets the parallelogram rule and disproves the claim.

Problem 5

1. Draw the 4-unit base along a grid row.
2. At one end, draw 3 units vertically; this makes a $90°$ angle.
3. Join the free ends to make 3 sides and one right angle.



Problem 6

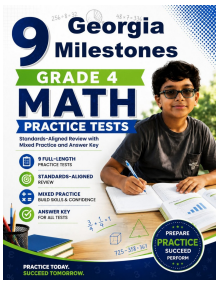
1. The rectangle has 4 right angles.
2. The long and short sides have different lengths; only opposite sides are equal.
3. A rhombus requires all 4 sides equal, so this rectangle is not one.

TESTINAR

Keep Building Grade 4 Math Skills

Choose the practice book matched to your state assessment and turn worksheet practice into a complete test-prep plan.

All Grade 4 books



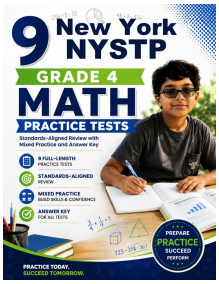
GEORGIA MILESTONES

9 Full-Length Math Practice Tests

Build Grade 4 accuracy, confidence, and test stamina with 9 printable practice tests.

Printable eBook • Instant PDF access

View eBook



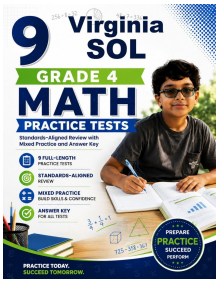
NEW YORK NYSTP

9 Full-Length Math Practice Tests

Build Grade 4 accuracy, confidence, and test stamina with 9 printable practice tests.

Printable eBook • Instant PDF access

View eBook



VIRGINIA SOL

9 Full-Length Math Practice Tests

Build Grade 4 accuracy, confidence, and test stamina with 9 printable practice tests.

Printable eBook • Instant PDF access

View eBook

Need a different state?
Testinar has Grade 4 math practice books for state assessments across the country.

TESTINAR.COM/GRADES/4