Classifying Shapes Worksheet

Grade 4 · Common Core 4.G.A.2

> Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

Practice

Builds the skill step by step.

1. Which shape has 4 right angles and 4 equal sides?
   A. trapezoid
   B. rectangle that is not a square
   C. triangle
   D. square

2. What is a triangle with one 90° angle called?
   A. an acute triangle
   B. an obtuse triangle
   C. a right triangle
   D. a square

3. How many pairs of parallel sides does a parallelogram have?

4. Which shape has no parallel sides?
   A. triangle
   B. rectangle
   C. square
   D. parallelogram

5. How many right angles does a square have?

6. Which shape always has 4 right angles but does not always have 4 equal sides?

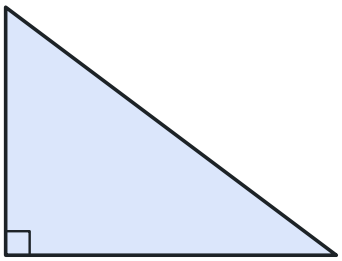
   A. trapezoid

   B. rectangle

   C. rhombus

   D. square

7. What kind of triangle is shown?



   A. obtuse triangle

   B. right triangle

   C. equilateral triangle

   D. acute triangle

8. How many corners of a rectangle are formed by two perpendicular sides?

9. Which shape has perpendicular sides?

   A. an equilateral triangle

   B. a circle

   C. a regular hexagon

   D. a rectangle

10. What is always true of a rhombus?

    A. It has 4 right angles.

    B. It has 3 sides.

    C. It has 2 pairs of parallel sides.

    D. It has no parallel sides.

ALBERT

Name _____ Date _____

Classifying Shapes Worksheet

Grade 4 · Common Core 4.G.A.2

On Level

Grade-level practice.

1. How many pairs of parallel sides does this shape have?



2. Which shape has at least one pair of parallel sides?

   A. trapezoid

   B. triangle

   C. circle

   D. a pentagon with no parallel sides

3. An acute triangle has all acute angles. How many acute angles does it have?

4. Which set of angles is NOT from a right triangle?

   A. 50°, 60°, 70°

   B. 30°, 60°, 90°

   C. 45°, 45°, 90°

   D. 20°, 70°, 90°

5. A shape has 4 sides, 2 pairs of parallel sides, 4 right angles and sides that are not all equal. What is it?

   A. rhombus

   B. rectangle

   C. trapezoid

   D. square

6. Which shape has no right angles?

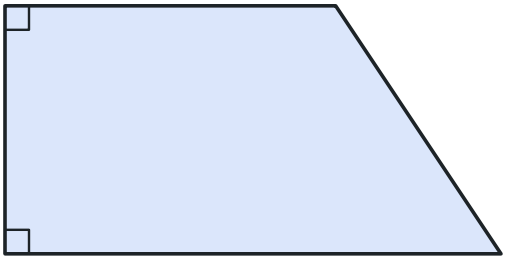
   A. a rectangle

   B. a square

   C. a right triangle

   D. a regular hexagon

7. How many right angles does this shape have?



8. In the shape from the last problem (bottom from (0,0) to (6,0), top from (0,3) to (4,3), straight left side, slanted right side), how many corners are formed by two perpendicular sides?

9. Can a triangle have 2 obtuse angles?

   A. Only if the sides are equal.

   B. Only a right triangle can.

   C. No. Two obtuse angles are already more than 180°.

   D. Yes.

10. A square belongs to which group of shapes?

    A. rectangles, rhombuses and parallelograms

    B. only rectangles

    C. only rhombuses

    D. triangles

Classifying Shapes Worksheet

Grade 4 · Common Core 4.G.A.2

Challenge

Multi-step and word problems that stretch it.

1. A rectangle is cut along one diagonal. How many right triangles does that make?

2. Is this statement true: "Every square is a rectangle"?

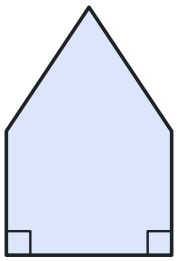
   A. No, because a square has equal sides.

   B. No, because a rectangle has 2 long sides.

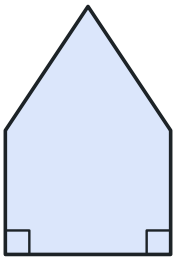
   C. Yes, because a square has 3 sides.

   D. Yes, because a square has 4 right angles.

3. How many pairs of parallel sides does this house shape have?



4. How many right angles does this house shape have?



5. A right triangle has a 45° angle. What is its third angle?

6. Which shape does NOT belong with the others, based on parallel sides?

   A. rectangle

   B. triangle

   C. rhombus

   D. square

7. How many pairs of perpendicular sides does a right triangle have?

8. Which is always true of a parallelogram?

   A. All angles are right angles.

   B. It has exactly one pair of parallel sides.

   C. Opposite sides are parallel.

   D. All sides are equal.

9. A shape has 4 sides and no parallel sides. Which could it be?

   A. a square

   B. a rhombus

   C. a rectangle

   D. a kite that is not a rhombus

10. Which triangle is impossible?

    A. a right triangle with an obtuse angle

    B. a right triangle with two acute angles

    C. an acute triangle

    D. an obtuse triangle with two acute angles