




Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Which figure is **always** a rectangle?

- A. Square
- B. Rhombus
- C. Quadrilateral
- D. Parallelogram

2. Determine which category each polygon belongs to. Check **all** boxes that apply. Shapes may belong to more than one category. If a polygon is **not** a square, parallelogram, or quadrilateral, check “None of These”.

	Square	Parallelogram	Quadrilateral	None of These
 Trapezoid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Hexagon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Rhombus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. a. List the properties shared by all squares.

b. List properties shared by squares and rhombuses.

c. List properties shared by squares and rectangles.

4. Which of the following statements about quadrilaterals is **not** true?

A. Every square is also a rectangle.

B. Every trapezoid is also a rectangle.

C. Every rhombus is also a parallelogram.

D. Every rectangle is also a parallelogram.

5. a. Sketch a rectangle that is also a rhombus.

b. How would you classify the shape you drew in Part (a)? Use the most specific name you can. Explain how you know you classified it correctly.

## Sources

1. PARCC Mathematics Practice Tests [Grade 5 Mathematics Paper-Based Practice Test](#) – Question #12  
[Grade 5 Mathematics Paper-Based Practice Test](#) from [Mathematics Practice Tests](#) is made available by [Partnership for Assessment of Readiness for College and Careers](#). © Copyright 1998 - 2015 Pearson Education, Inc. or its affiliate(s). All rights reserved. Accessed Feb. 5, 2018, 12:11 p.m.. Modified by Fishtank Learning, Inc.
2. Smarter Balanced Assessment Consortium: Sample Items [Sample Item #3605](#)  
[Sample Item #3605](#) from [Smarter Balanced Assessments' Sample Items](#) is made available by [Smarter Balanced Assessment Consortium](#). © The Regents of the University of California – Smarter Balanced Assessment Consortium. Accessed Feb. 14, 2018, 3:30 p.m..
3. EngageNY Mathematics [Grade 5 Mathematics > Module 5 > Topic D > Lesson 19](#) – Problem Set, Question #3  
[Grade 5 Mathematics > Module 5 > Topic D > Lesson 19](#) of the New York State Common Core Mathematics Curriculum from [EngageNY](#) and [Great Minds](#). © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the [CC BY-NC-SA 3.0 US](#) license. Accessed Dec. 2, 2016, 5:15 p.m.. Modified by Fishtank Learning, Inc.
4. Massachusetts Department of Elementary and Secondary Education [Spring 2015 Grade 5 Mathematics Test](#) – Question #6  
[Spring 2015 Grade 5 Mathematics Test](#) is made available by the [Massachusetts Department of Elementary and Secondary Education](#). © 2017 Commonwealth of Massachusetts. Accessed Dec. 5, 2017, 4:12 p.m..

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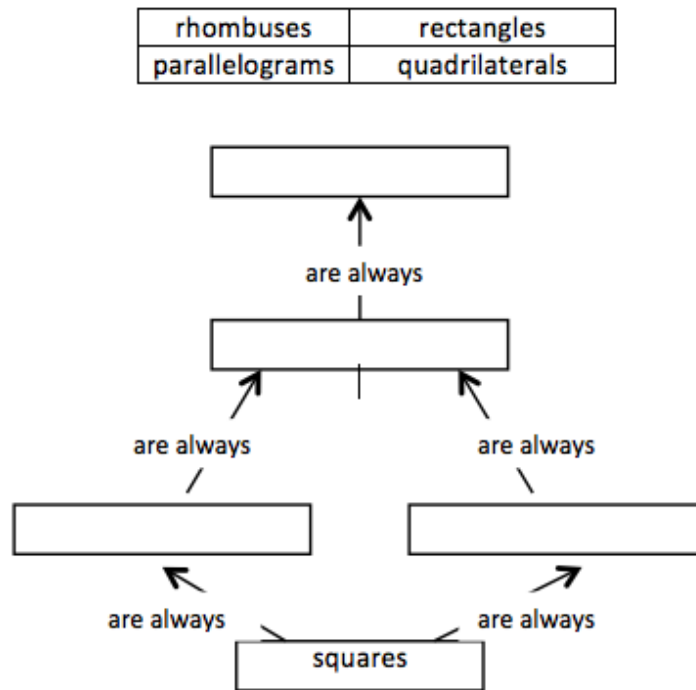
1. A square and a rhombus are shown below.



Which attribute is true of one of the shapes but not of both?

- A. All angles are right angles.
  - B. All sides are the same length.
  - C. There are two sets of equal angles.
  - D. There are two sets of parallel sides.
2. Which type of quadrilateral can have exactly 1 pair of parallel sides?
- A. Rectangle
  - B. Rhombus
  - C. Square
  - D. Trapezoid

3. Fill in the blanks with the words below to complete the diagram that shows the relationship among the figures listed. Each category will be used only once.



4. John says that because rhombuses do not have perpendicular sides, they cannot be rectangles. Explain his error in thinking.

5. Explain when a trapezoid is not a parallelogram. Sketch an example.

6. a. When can a rectangle also be called a square?

b. When can a rhombus also be called a square?

c. When can a trapezoid also be called a square?

## Sources

1. EngageNY [New York State Testing Program Grade 5 Common Core Mathematics Test Released Questions June 2017](#) – Question #25  
From [EngageNY.org](#) of the New York State Education Department. [New York State Testing Program Grade 5 Common Core Mathematics Test Released Questions June 2017](#). Internet. Available from <https://www.engageny.org/resource/released-2017-3-8-ela-and-mathematics-state-test-questions/file/150271>; accessed Dec. 5, 2017, 3:55 p.m..
2. EngageNY [New York State Testing Program Grade 5 Common Core Mathematics Test Released Questions May 2016](#) – Question #5  
From [EngageNY.org](#) of the New York State Education Department. [New York State Testing Program Grade 5 Common Core Mathematics Test Released Questions May 2016](#). Internet. Available from <https://www.engageny.org/resource/released-2016-3-8-ela-and-mathematics-state-test-questions/file/148601>; accessed Dec. 5, 2017, 4:10 p.m..
3. PARCC Mathematics Practice Tests [Mathematics Practice Tests](#) – Grade 5 Computer-Based Practice Test Unit 1, Question #12  
[Mathematics Practice Tests](#) from [Mathematics Practice Tests](#) is made available by [Partnership for Assessment of Readiness for College and Careers](#). © Copyright 1998 - 2015 Pearson Education, Inc. or its affiliate(s). All rights reserved. Accessed July 29, 2017, 10:35 a.m.. Modified by Fishtank Learning, Inc.
4. EngageNY Mathematics [Grade 5 Mathematics > Module 5 > Topic D > Lesson 21](#) – Problem Set, Question #2  
[Grade 5 Mathematics > Module 5 > Topic D > Lesson 21](#) of the New York State Common Core Mathematics Curriculum from [EngageNY](#) and [Great Minds](#). © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the [CC BY-NC-SA 3.0 US](#) license. Accessed Dec. 2, 2016, 5:15 p.m..
5. EngageNY Mathematics [Grade 5 Mathematics > Module 5 > Topic D > Lesson 21](#) – Homework, Question #2a  
[Grade 5 Mathematics > Module 5 > Topic D > Lesson 21](#) of the New York State Common Core Mathematics Curriculum from [EngageNY](#) and [Great Minds](#). © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the [CC BY-NC-SA 3.0 US](#) license. Accessed Dec. 2, 2016, 5:15 p.m..
6. EngageNY Mathematics [Grade 5 Mathematics > Module 5 > Topic D > Lesson 19](#) – Problem Set, Question #3  
[Grade 5 Mathematics > Module 5 > Topic D > Lesson 19](#) of the New York State Common Core Mathematics Curriculum from [EngageNY](#) and [Great Minds](#). © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the [CC BY-NC-SA 3.0 US](#) license. Accessed Dec. 2, 2016, 5:15 p.m.. Modified by Fishtank Learning, Inc.