

Third Grade  
**Answer Key**  
**Unit 7: Geometry**

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for navigation

# Problem of the Day

## Lesson 1

Wendy arrived at the store at 10:45. She shopped for an hour and 5 minutes. What time did Wendy finish shopping?

Answer: 11:50

## Lesson 2

Solve for the missing sides.

$$P = 36 \text{ inches}$$

6 in.

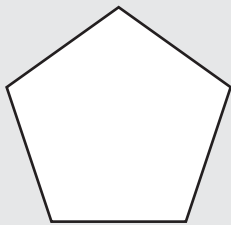


6 in.

Answer: 12 in.

## Lesson 3

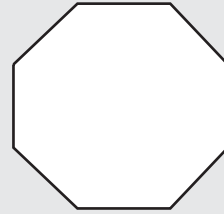
How many sides does the figure below have?



Answer: 5

## Lesson 4

Examine the figure below and determine its attributes.



Sides: 8

Edges: 8

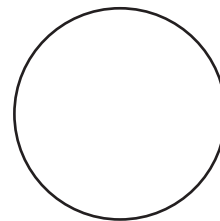
Vertices: 8

## Lesson 5

Name the figures below.



Answer: trapezoid



Answer: circle

# Problem of the Day

## Lesson 6

I am a special quadrilateral that has only one set of parallel lines. What shape am I?

Answer: trapezoid

## Lesson 7

I am a special quadrilateral that has all equal sides but no right angles. What shape am I?

Answer: parallelogram

## Lesson 8

I am a special quadrilateral that has two sets of parallel lines, four right angles, and my opposite sides are equal in length. What shape am I?

Answer: rectangle

## Lesson 9

Is a square a rectangle? Why or why not? Explain your answer below.

**Sample answer: Yes. A square has four sides and four corners just like a rectangle.**

## Lesson 10

Why can a trapezoid not be considered a square? Explain your answer below.

**Sample answer: A trapezoid does not have four equal sides or four right angles.**

# Problem of the Day

## Lesson 11

What 2-dimensional shapes are parallelograms with four right angles? (Hint: Name two shapes.)

Answer: rectangle & square

## Lesson 12

What is different about a trapezoid when compared to the other quadrilaterals?

Sample answer: It does not have right angles

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

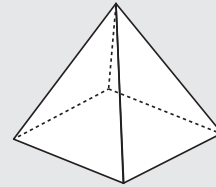
## Lesson 13

What type of lines never cross?  
Name one shape that is composed of these types of lines.

Answer: parallelogram and rectangle

## Lesson 14

Examine the figure below and determine its attributes.



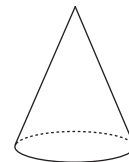
Faces: 5

Edges: 8

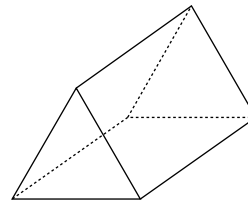
Vertices: 5

## Lesson 15

Name the figures below.



Answer: cone



Answer: triangular pyramid

# Problem of the Day

## Lesson 16

I am a 3-dimensional shape that rolls.  
I have two bases but no edges or  
vertices. What shape could I be?

Answer: \_\_\_\_\_ **cylinder**

## Lesson 17

I am a 3-dimensional shape that has  
the same shape for all of my faces.  
What shape could I be?

Answer: \_\_\_\_\_ **cube**

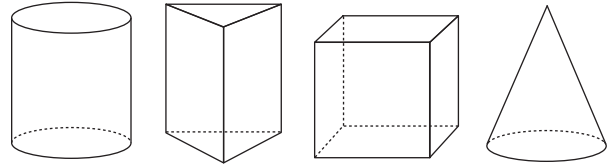
## Lesson 18

I am a 3-dimensional figure that rolls.  
I do not have any edges, vertices, or  
faces. What shape could I be?

Answer: \_\_\_\_\_ **sphere**

## Lesson 19

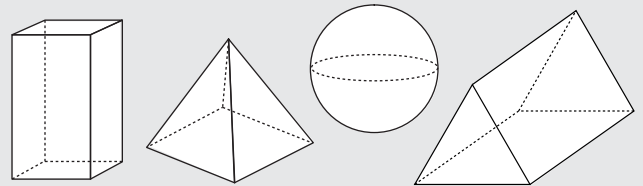
Explain how you could sort the shapes  
below into two different categories.



**Sample answer: You could sort  
the shapes by the shape of  
their faces or by the number of  
vertices.**

## Lesson 20

Explain how you could sort the shapes  
below into two different categories.  
You cannot sort these shapes the  
same way you did on the previous  
day's problem. Think outside the box!

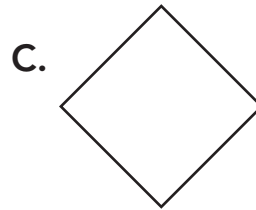
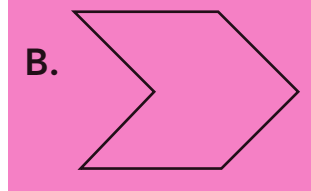
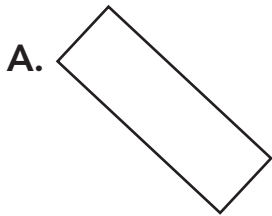


**Sample answer: You could sort  
the shapes by the number of  
sides or faces.**

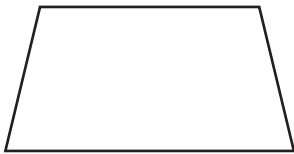
# Pre-Assessment

Read each problem below and solve.

1. Which of the following shapes is not a quadrilateral?

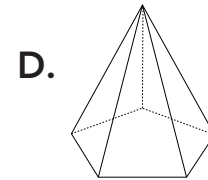
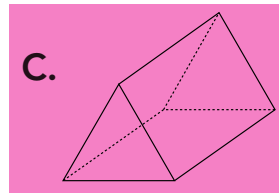
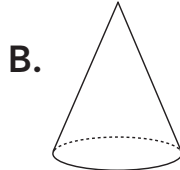
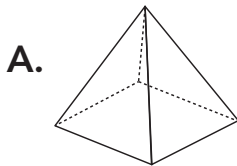


2. Name the shape shown below.

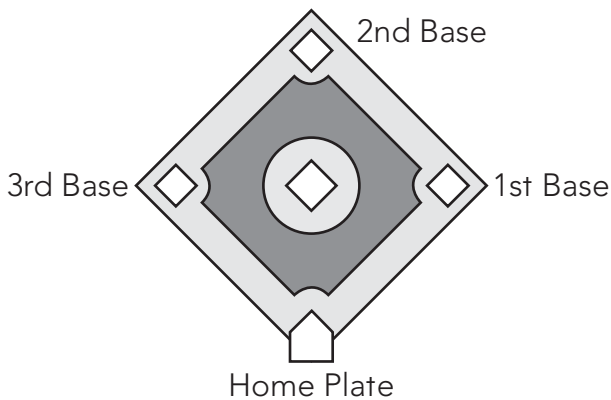


Answer: trapezoid

3. Which of the following solids is a triangular prism?

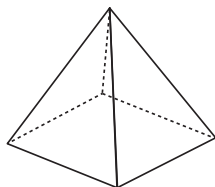


4. Examine the baseball field below. What shape is home plate?





Answer: pentagon

5. Greg put a sticker on all the faces of the figure below. How many stickers did Greg use?



Answer: five

# 2-dimensional Shape Vocabulary

Term	Definition	Picture
side	The _____ <b>edge</b> _____ surrounding the figure	<b>Pictures will vary.</b>
vertex	The place where two _____ <b>sides</b> _____ meet and form an angle	<b>Pictures will vary.</b>
angle	A figure that is formed when two rays have the same _____ <b>end point</b> _____	<b>Pictures will vary.</b>
right angle	Forms a _____ <b>L-shaped</b> _____ corner	
parallel lines	Lines that _____ <b>never</b> _____ <b>touch</b> _____ each other	

# Apply 2-dimensional Vocabulary

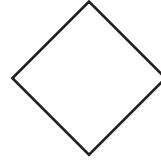
Read each problem below and find the answer.

1. How many vertices does the shape below have?



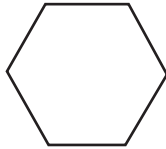
4

2. Count the sides on the figure below.



4

3. How many angles does the shape below have?



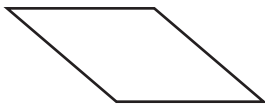
6

4. How many right angles does the shape below have?



4

5. How many sets of parallel lines does the figure below have?



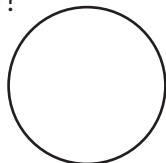
2

6. How many sides are on the figure below?



4

7. How many vertices does the shape below have?



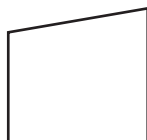
0

8. How many right angles does the shape below have?



4

9. How many sets of parallel lines does the shape below have?



1

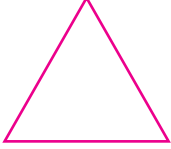



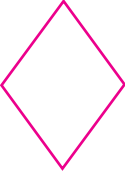
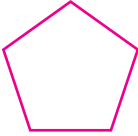
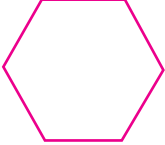
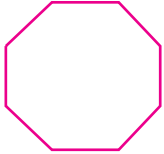
10. How many angles does the shape below have?



3



# 2-dimensional Shapes





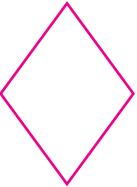
Shape	Picture	Sides	Vertices	Angles	Right Angles
triangle		3	3	3	Answers will vary.
square		4	4	4	4
rectangle		4	4	4	4
trapezoid		4	4	4	0
rhombus		4	4	4	0
pentagon		5	5	5	0
hexagon		6	6	6	0
octagon		8	8	8	0

# Identifying Quadrilaterals

What attributes define each type of quadrilateral?

A quadrilateral  
is a \_\_\_\_\_  
with \_\_\_\_\_ sides.

Name \_\_\_\_\_

Types of Quadrilaterals	Number of Sides	Parallel Lines	Sides of Equal Length	Right Angles	Picture
Parallelogram	4	yes	yes	yes	
Trapezoid	4	yes	yes	no	
Rectangle	4	yes	yes	yes	
Square	4	yes	yes	yes	
Rhombus	4	yes	yes	no	

# Quadrilaterals Quiz

Use the word bank to fill in the statements below. Each word can be used only once.

rectangle	parallelogram	rhombus
trapezoid	square	quadrilateral

1. A **trapezoid** is a type of special quadrilateral with one set of parallel lines.
2. A special quadrilateral with four right angles is called a **rectangle**.
3. **parallelogram** is a special quadrilateral that has two sets of parallel lines.
4. A **rhombus** is a type of special quadrilateral that has all equal sides.
5. **square** is a special quadrilateral that has all equal sides and four right angles.
6. A polygon with four sides is called a **quadrilateral**.

Read each problem below and determine the answer.

7. Is a trapezoid also a parallelogram? Why or why not?

**Sample answer: No. It does not have two sets of parallel sides.**

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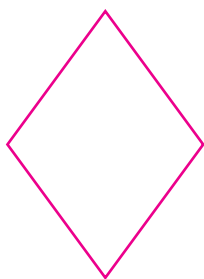


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8. Draw the special quadrilateral that has four right angles and two sets of sides that are equal length.



9. Draw the special quadrilateral that has four sides of equal length but no right angles.



10. Is a rectangle a square? Why or why not?

**Sample answer: No. A rectangle does not have four equal sides.**

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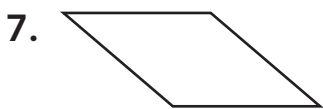
# 2-dimensional Shapes Quiz

Use the word bank to fill in the statements below. Each word can be used only one time.

rhombus	quadrilateral	vertices
polygon	square	right angle

1. A special quadrilateral with four sides of equal length, but no right angles is called a rhombus.
2. vertices are the corners where two sides meet.
3. A closed-sided figure with at least three sides is called a polygon.
4. A right angle forms a perfect square in the vertex of the figure.
5. A square is a special quadrilateral that has four right angles and all equal sides.
6. A polygon with four sides, four angles, and four vertices is called a quadrilateral.

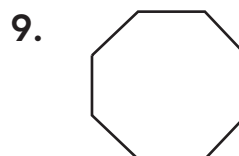
Name each shape below.



rhombus



square



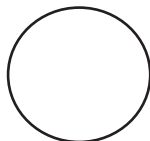
octagon



quadrilateral

Read each problem below and justify your answer.

11. Is the figure on the right a polygon? Why or why not?



Sample answer: No. It does not have any sides.

\_\_\_\_\_

\_\_\_\_\_

12. Can a rectangle be called a square? Why or why not?

Sample answer: No. A rectangle does not have four equal sides.

\_\_\_\_\_

\_\_\_\_\_

Answers  
will vary.

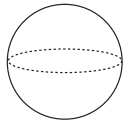
# 3-dimensional Shapes Vocabulary

Term	Definition	Picture
solid figure	A <u>three dimensional</u> figure that has length, width, and <u>height</u>	Pictures will vary.
face	The <u>flat</u> surface of a figure	Pictures will vary.
edge	The place where two <u>sides meet</u> _____	Pictures will vary.
vertex	A corner where three or more <u>sides meet</u> _____	Pictures will vary.
base	The <u>bottom</u> surface of solid figures that can <u>lay flat</u> _____	Pictures will vary.

# Apply 3-dimensional Vocabulary

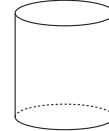
Read each problem below and find the answer.

1. How many edges does the shape below have?



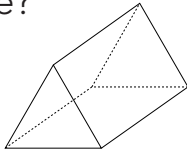
none

2. How many bases does the shape below have?



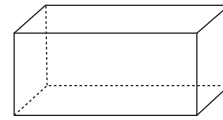
2

3. How many vertices does the shape below have?



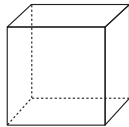
6

4. How many faces does the shape below have?



6

5. How many edges does the shape below have?



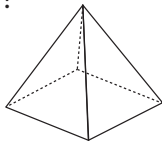
6

6. How many bases does the shape below have?



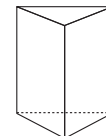
1

7. How many vertices does the shape below have?



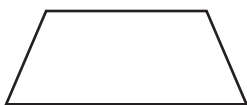
5

8. How many faces does the shape below have?



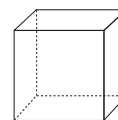
5

9. Is this figure a solid figure?  
Why or why not?




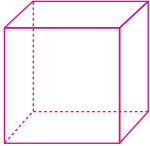
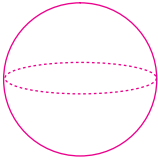
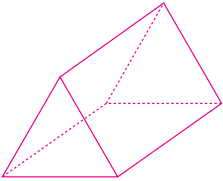
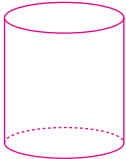
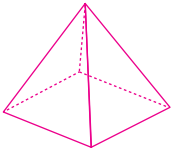
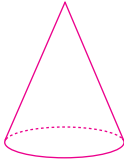
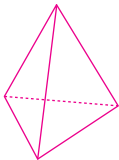
**Sample answer: No. It does not have height.**

10. Is this figure a solid figure?  
Why or why not?



**Sample answer: Yes. It has length, width, and height.**

# 3-dimensional Shapes

Shape	Picture	Faces	Edges	Vertices	Bases
rectangular prism		6	12	8	2
cube		6	12	8	6
sphere		0	0	0	0
triangular prism		5	9	6	2
cylinder		2	0	0	2
square pyramid		5	8	5	1
cone		1	0	0	1
triangular pyramid		4	6	4	1

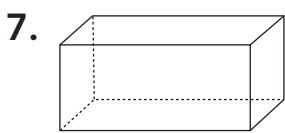
# 3-dimensional Shapes Quiz

Use the word bank to fill in the statements below. Each word can be used only one time.

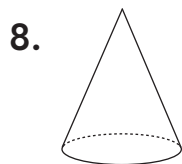
edge	base	vertex
solid figure	face	sphere

1. A corner where edges meet and form a point is called a vertex.
2. A base is a flat surface on a solid figure that can roll.
3. A place where two faces meet is called a(n) edge.
4. A sphere is a solid figure that has no faces, no vertices, and no edges.
5. A solid figure is a geometric figure that has a length, width, and height.
6. A flat surface on a 3-dimensional figure is called a face.

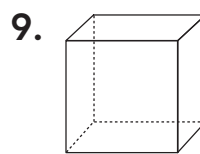
Name each shape below.



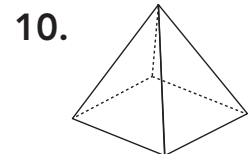
rectangular prism



cone



cube



rectangular pyramid

Read each problem below and justify your answer.

11. Does a cylinder have any edges or vertices? Why or why not? Explain your answer.

Sample answer: No. It is round and can roll.

12. What is the difference between a pyramid and a prism?

Sample answer: A pyramid has triangular faces.



# Assessment

Read each problem below and solve.

1. A \_\_\_\_\_ is a closed-sided figure with three or more sides.

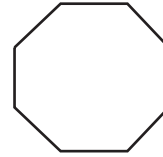
A. special quadrilateral

**B. polygon**

C. quadrilateral

D. solid figure

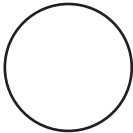
2. How many sides are on the figure below?



Answer: 8

3. Circle the 3-dimensional figure.

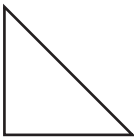
A.



**C.**



B.



D.

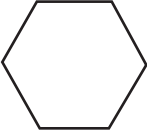


4. What are parallel lines?

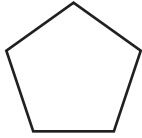
**Sample answer: Two lines that do not intersect.**

5. Which of the following is a quadrilateral?

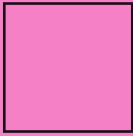
A.



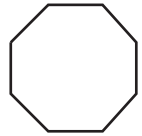
C.



B.



D.



6. Which statement is true?

A. A trapezoid is a parallelogram.

B. A square is a rectangle.

C. A rhombus is a square.

D. A rectangle is a square.

7. I am a 2-dimensional figure with six sides and six vertices. What shape could I be?

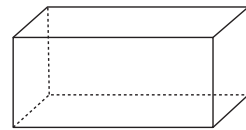
A. pentagon

B. rectangle

C. octagon

D. hexagon

8. Name the figure below.



Answer: rectangular prism

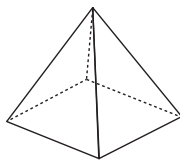
9. Which of these figures is represented by a box?

- A. cube**
- B. cone
- C. cylinder
- D. pyramid

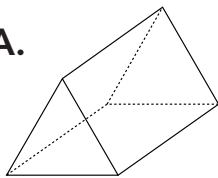
10. Randi found a shape that was a quadrilateral with one set of parallel lines, but no equal sides. What shape could Randi have found?

- A. triangle
- B. square
- C. trapezoid**
- D. pentagon

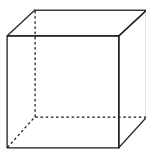
11. Which figure has fewer vertices than the square pyramid?



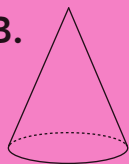
A.



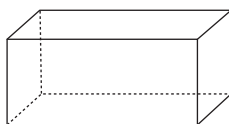
C.



B.



D.



12. Which of the following are polygons?



#1



#2



#3



#4



#5

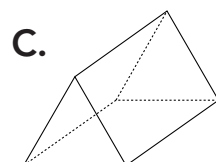
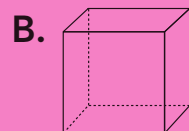
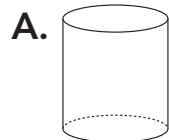
A. 1, 2, 4

B. 2, 4, 5

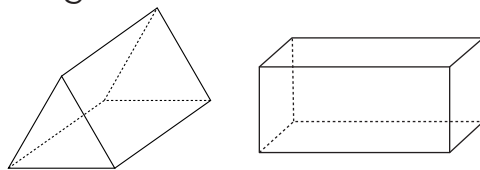
C. 1, 2, 3

**D. 1, 3**

13. Which of these figures has 6 faces?

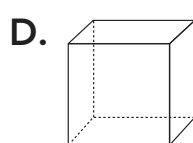
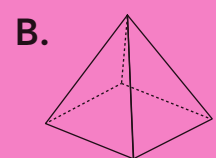
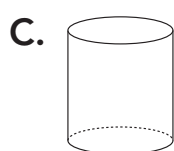
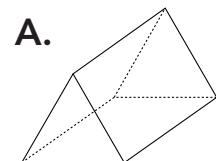


14. What statement is true about these two figures?



- A. They both have 5 faces.
- B. They both are pyramids.
- C. They both are prisms.
- D. They both have 6 faces.

15. Which of these figures has 5 faces, 5 vertices, and 8 edges?



16. Which polygon has exactly five sides?

- A. hexagon
- B. quadrilateral
- C. triangle
- D. pentagon

- 17.** George and his friend draw a quadrilateral with all equal sides. George says the shape has to be a square. Do you agree or disagree? Explain your answer.

Justify:

**Sample answer: No, a rhombus also has equal sides.**

---

---

---

- 18.** Wendy draws a solid figure that has 6 faces, 8 vertices, and 12 edges. Wendy says the solid figure has to be a cube. Is she correct? Why or why not? Explain your answer.

Justify:

**Sample answer: No, it could also be a rectangular prism.**

---

---

---

- 19.** Tina and Mark sort solid figures into groups that can roll and not roll. Which group below consists of solid figures that do not roll?
- A.** cube, rectangular prism, cylinder
  - B.** cone, sphere, cylinder
  - C.** rectangular prism, cone, and sphere
  - D.** pyramid, rectangular prism, cube

- 20.** Maya goes shopping at the mall and sees the objects below. Which is shaped like a sphere?
- A.** football ball
  - B.** soccer ball
  - C.** tennis shoe
  - D.** clothes hanger

I have eight vertices.  
What shape am I?

octagon

---

I have four sides and  
four right angles.  
What shape could I be?

Sample answer: square

I have six sides.  
What shape am I?

hexagon

---



I only have three angles.  
What shape could I be?

triangle

---

I have four sides  
but no right angles.  
What shape could I be?

Sample answer: trapezoid

I have five vertices.  
What shape am I?

pentagon

---

I have four sides,  
that are all equal  
in length, and  
four right angles.  
What shape am I?

square

---

I have four vertices.  
Sometimes I have right  
angles in my shape and  
sometimes I do not.  
What shape could I be?

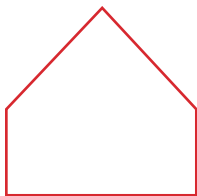
quadrilateral

Examine each figure. If it is a polygon, write the name of the figure. If it is not a polygon, state the reasoning.

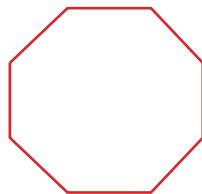


Sample answer: It is not a polygon.

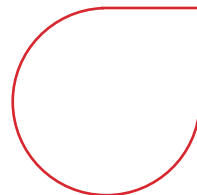
It is not a closed figured.



Pentagon



Octagon

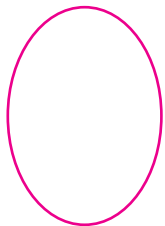


Sample answer: It is not a polygon.

It does not have three sides.

Read each problem and determine the answer.

Draw an example of a figure that is not a polygon. Explain why the figure is not a polygon.



Sample answer:

It does not have three sides.

Which of the figures below is not a polygon?

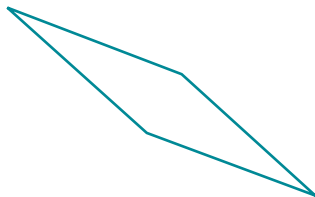


Examine each shape below and write the name of the special quadrilateral.



trapezoid

---



rhombus

---



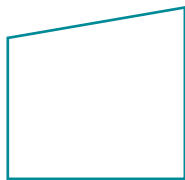
rectangle

---



rhombus

---



quadrilateral

---



square

---



Determine the quadrilateral that is being described and illustrate it.

This quadrilateral has four sides that are not equal in length and has two sets of parallel sides.



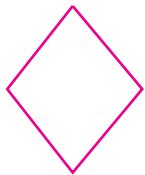
rectangle

This quadrilateral has two sets of parallel lines and two sets of sides that are equal in length. It also has four right angles.



square

This quadrilateral has four equal sides and two sets of parallel lines. There are no right angles.



rhombus

This quadrilateral has one set of parallel lines.



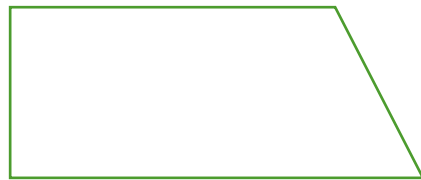
trapezoid

Examine each shape below. Write as many special quadrilateral names as possible for each quadrilateral.



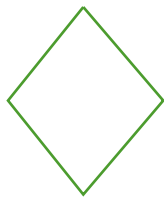
quadrilateral, parallelogram, rectangle

---



quadrilateral

---



quadrilateral, parallelogram, rhombus

---



quadrilateral, parallelogram, square,  
rectangle

---

Name all the possible quadrilaterals that fit the rules below.

Has two sets of  
parallel sides

parallelogram, rectangle,  
square

Has four sides  
that are all equal  
length

parallelogram, square,  
rhombus

Has no right  
angles

rhombus, trapezoid

Has two sets of  
sides that are  
equal length

parallelogram, rectangle

Has one set of  
parallel sides

trapezoid

Has four right  
angles

parallelogram, square,  
rectangle

I have four right angles and my opposite sides are equal. What am I?

Identify my name and draw an illustration.

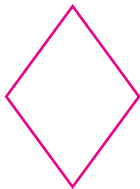
**rectangle**



I have four sides of equal length but do not have any right angles. What am I?

Identify my name and draw an illustration.

**rhombus**



I only have one side of parallel lines.  
What am I?

Identify my name and draw an illustration.

**trapezoid**



I am the most unique quadrilateral of all.  
I fit into all the other quadrilaterals' criteria,  
but none of the other quadrilaterals  
meet all my criteria.

Identify my name and draw an illustration.

**square**



I am a four-sided polygon.  
What am I?

Identify my name and draw an illustration.

**quadrilateral**





I have two pairs of parallel lines.  
What am I?

Identify my name and draw an illustration.

**parallelogram**



How are rectangles and rhombuses alike?  
How are they different?

Give one reason for each.

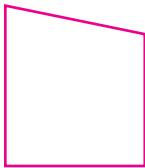
**They each have four sides.**  
**Rectangles have right angles.**

I am a special quadrilateral whose opposite sides are equal in length.  
What special quadrilateral am I?

Hint: There is more than one correct answer!

**Sample answer:**  
**rectangle, square, rhombus**

Draw two different quadrilaterals that are not rectangles, squares, or rhombuses.



What is a rectangle with all equal sides?

Identify the name and draw an illustration.

**square**



What is a parallelogram with four right angles?

Identify my name and draw an illustration.

**Sample answer:**  
**rectangle**



I am a quadrilateral with two right angles  
but no sides of equal length.

I also have one pair of parallel lines.

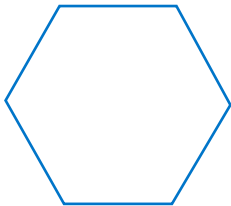
What special quadrilateral am I?

Identify my name and draw an illustration.

**quadrilateral**



How many vertices are on the shape below?



six



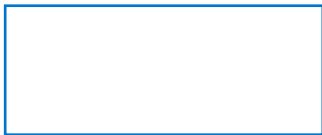
What quadrilateral has only one set of parallel lines?

**trapezoid**

Draw an example of a polygon.



Why is this figure a rectangle,  
but not a square?

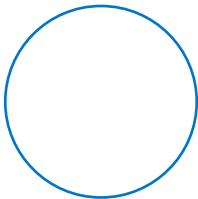


**Example answer: It does  
not have four equal sides.**

What is the term used to describe two lines that will never cross?

parallel

How many right angles does the shape below have?

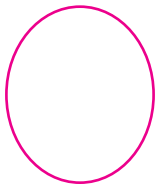


**zero**

What is a quadrilateral?

**Sample answer:**  
**A polygon that has**  
**four sides.**

Draw an example of a figure that is not a polygon.

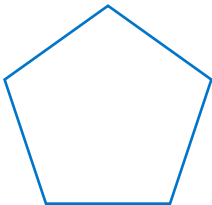


What quadrilateral has four right angles and two sets of parallel lines, but does not have all equal sides?

parallelogram

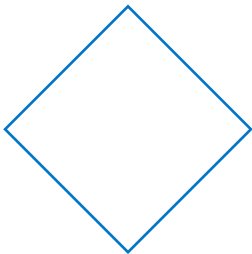


How many angles are on the shape below?



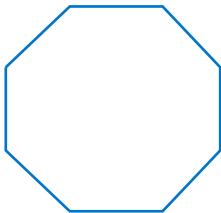
five

How many sides are on the shape below?



four

What is the figure below called?



octagon

Which of the following is not true about a square?



- A. A square is a rectangle.
- B. A square is a quadrilateral.
- C. A square is a parallelogram.
- D. A square is a trapezoid.

Examine each shape below.



Which best describes the 3 shapes?

- A. Polygons with 4 or more vertices
- B. Polygons that are all quadrilaterals
- C. Polygons that are all triangles
- D. Polygons with 5 or more sides

Which statement is not true about the two figures below?



- A. Both shapes are polygons.
- B. Both shapes have 5 or more sides.
- C. Both shapes are quadrilaterals.
- D. Both shapes have 5 or more vertices.

Which of the following describes all of the shapes below?



- A. They are all triangles.
- B. They are all polygons.
- C. They are all quadrilaterals.
- D. They are all pentagons.

Mrs. Dawson gave her class shapes and asked them to select the pentagon.  
Which shape should her students select?

A.



B.



C.



D.





Read the descriptions below and determine what shape is being described.

- I am a polygon.
- I am a quadrilateral.
- I am a parallelogram with four right angles.

Which shape am I?



I do not have any faces.  
What shape am I?

**sphere**

---

I am a prism, but I only have nine edges. What shape could I be?

**triangular prism**

---

Grade 3 • Unit 7 • Lesson 14

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3-dimensional Shapes

Riddle Cards, Set 1

I only have two flat bases and  
I can roll. Which shape am I?

**cylinder**

---

I am a 3-dimensional figure  
whose faces are all the same.  
What shape could I be?

**cube**

---

I am a pyramid shape  
but have a square base.  
What shape am I?

rectangular pyramid

I have one flat base and I can roll.  
Which shape am I?

**cone**

---

I am a prism with 12 edges and 8 vertices. What shape am I?

**rectangular prism**

---



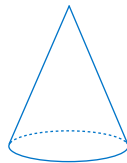
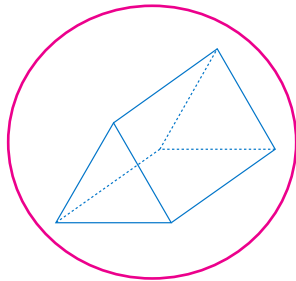
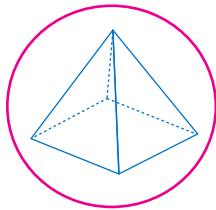
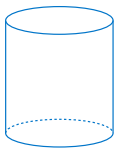
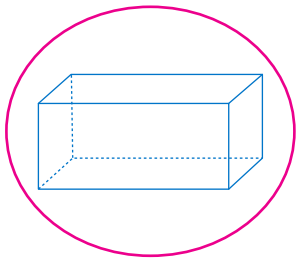
I am a shape with only  
four faces and four vertices.  
What shape could I be?

**triangular pyramid**

---

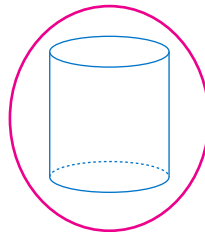
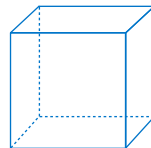
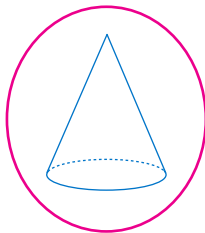
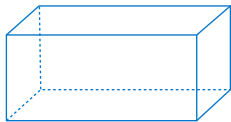
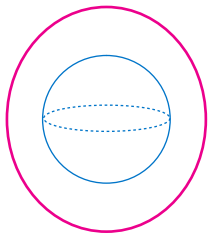
# Circle the shapes that follow the rule.

## Rule: Has 8 or more edges



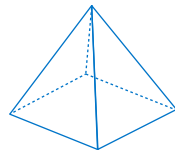
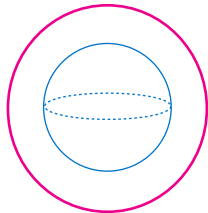
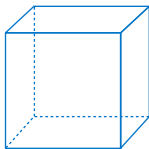
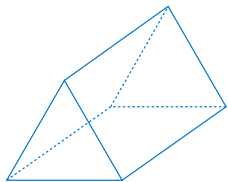
# Circle the shapes that follow the rule.

## Rule: Has no edges



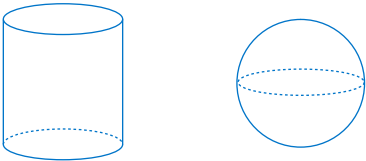
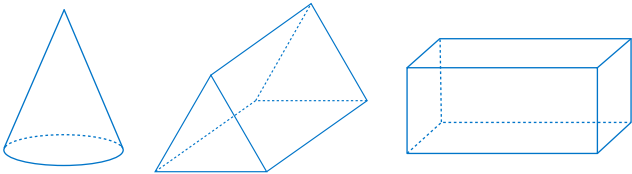
# Circle the shapes that follow the rule.

## Rule: Shape can roll




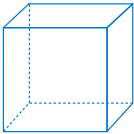
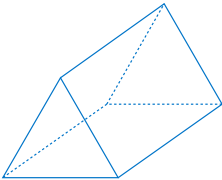
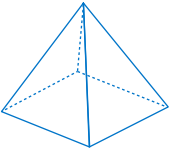
The shapes below have been sorted.

Title each column with an appropriate rule. **Answers will vary.**

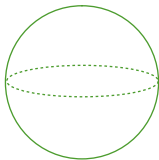
Shapes that have no vertices:	Shapes that have vertices:
	

The shapes below have been sorted.

Title each column with an appropriate rule. **Answers will vary.**

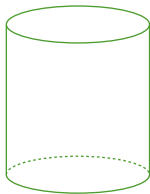
Shapes with six faces:	Shapes with less than six faces:
 	 

Name the shape below.



**sphere**

How many vertices are on the shape below?



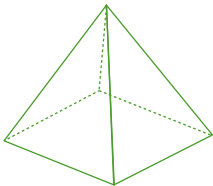
**zero**



Draw an example of a solid figure that does not roll.



This figure is considered a pyramid.  
Why is this not a prism?

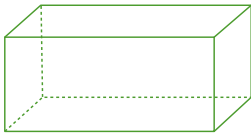


**Sample answer: It only has one base.**

What term is used to describe the number of flat surfaces on a solid figure?

**faces**

How many edges does this figure have?



12

What is a vertex?

**Sample answer:**  
**A point where lines meet.**

Daniel went shopping and saw a basketball on display. What solid figure is the same shape as the basketball?

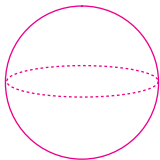
**sphere**

What solid has all the same faces?

cube

Draw an example of a solid figure that rolls.

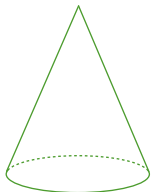
**Answers will vary.**



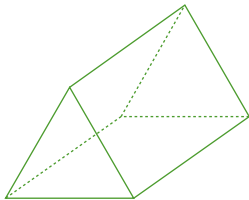


Identify the number of faces, edges, and vertices on the figure below.

**1 Face**  
**0 Edges**  
**1 Vertices**



How many faces does the figure below have?



five

Use the clues below to determine the shape:

- I am a 3-dimensional shape.
- I have at least one triangular face.

Which shape could not be the mystery shape?

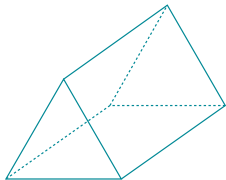
A. triangular pyramid

B. cube

C. square pyramid

D. triangular prism

Which shows the correct number of edges and vertices for the figure below?



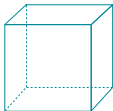
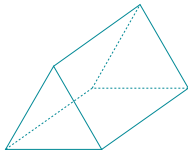
- A. 9 edges and 8 vertices
- B. 10 edges and 6 vertices**
- C. 9 edges and 6 vertices
- D. 10 edges and 8 vertices

Grade 3 • Unit 7 • Lesson 17

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3-dimensional Shapes  
Word Problem Task Cards, Set 1

Martin sorted the figures below by the attribute “fewer than 5 vertices.” Which figure would go into this group?



A. cylinder

C. cube

B. rectangular prism

D. triangular prism

Which 3-dimensional figures have circular bases?

- A. cylinder and cone
- B. octagon and circle
- C. circle and cylinder
- D. cone and circle

Robert thinks of a mystery figure and gives clues to Timothy to solve. Below are Robert's clues:

- It is a 3-dimensional solid.
- It has 4 vertices.
- It has 4 faces.

What could Robert's mystery figure be?

A. rectangular prism  
C. triangular prism

B. square pyramid

D. triangular pyramid

Shapes were sorted into the two groups below.  
What could be an appropriate title for each group?



**Group 1**



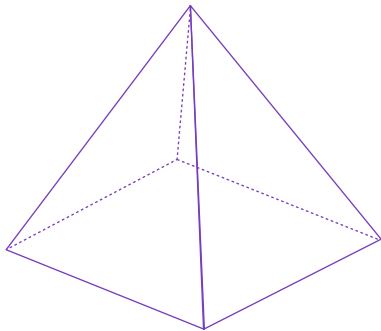
**Group 2**

- A. Shapes without faces, Shapes with faces
- B. Shapes that roll, Shapes that do not roll
- C. Shapes with vertices, Shapes without vertices
- D. Shapes that are 2-dimensional, Shapes that are 3-dimensional



How many faces, edges, and vertices does the figure below have?

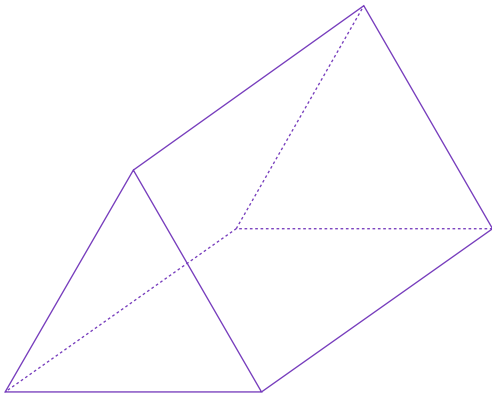
**5 faces**  
**8 edges**  
**5 vertices**



What is the difference between a square and a rectangle?

**Sample answer:**  
**A square has four equal sides**  
**and a rectangle does not.**

What is the name of this figure?



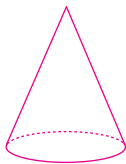
**triangular prism**

Which of the following special quadrilaterals has two sets of parallel lines and all equal sides, but no right angles?

- A. trapezoid
- B. rectangle
- C. rhombus
- D. square

Draw an example of a solid figure that rolls.

**Answers will vary.**

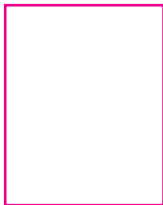


What is a polygon?

Draw an example of a polygon.

**Sample answer:**

**A polygon has at least three sides.**



I am a solid figure that has two bases  
but no vertices or edges. What shape am I?

A. cone

B. sphere

C. cylinder

D. circle

Mike sorts some solid figures into two piles. One pile has solid figures that can roll and one has solid figures that cannot roll. Which figures would be in the pile of solid figures that can roll?

- A. cylinder, cone, triangular prism
- B. cone, cylinder, sphere
- C. sphere, cone, rectangular prism
- D. rectangular prism, cube, sphere



Which of the following is not considered a special quadrilateral?

- A. trapezoid
- B. pentagon
- C. rectangle
- D. parallelogram

Quinn says that a square can be a rhombus  
and a rhombus can be a square.  
Is this true? Why or why not?

**Sample answer:**  
**No. A square has four right angles  
and a rhombus does not.**

Marty drew a special quadrilateral with two sets of parallel lines and four right angles. She said the figure has to be a square. Is she correct? Why or why not? Explain your answer.

**Sample answer:**  
**No. It could also be a rectangle.**

Which of the following is a face on a triangular pyramid?

- A. circle
- B. square
- C. rectangle
- D. triangle