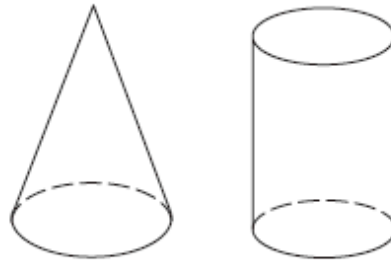


Question 5
Benchmark A
March 2006

A cone and a cylinder are shown.



Give one way that a cone and a cylinder are alike.

Give one way that a cone and a cylinder are different.

Question 9
Benchmark A
Spring 2007

Roy drew a triangle with exactly two congruent angles and two congruent sides.

What kind of triangle did Roy draw?

- A. equiangular
- B. equilateral
- C. isosceles
- D. scalene

Question 42
Benchmark B
May 2009

Luke used his pencil to poke a small hole through a sheet of unlined paper.

Which geometry terms can be used to describe the hole in the paper?

- A. a point on a line
- B. a line on a point
- C. a line on a plane
- D. a point on a plane

4th Grade Mathematics Ohio Achievement Test
Geometry & Spatial Standard

Question 1
Benchmark B
March 2008

The spaces in a parking lot are marked by line segments, as shown.



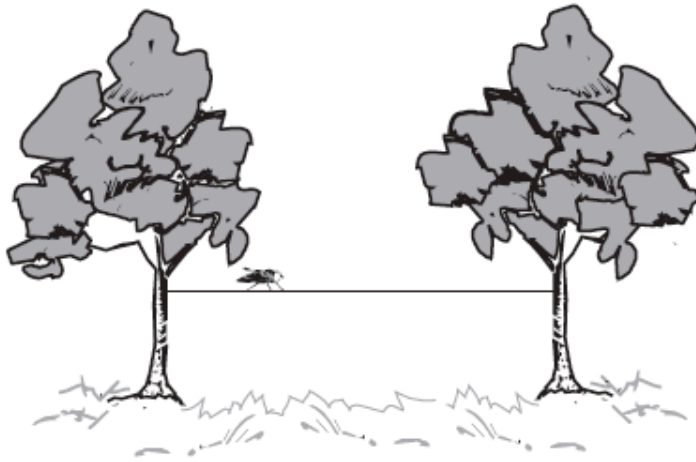
Which describes the line segments that are marked in the parking lot?

- A. curved
- B. intersecting
- C. parallel
- D. perpendicular

Question 21
Benchmark B
March 2006

4th Grade Mathematics Ohio Achievement Test
Geometry & Spatial Standard

A bug lands on a rope stretched between two trees on a lawn at a park.

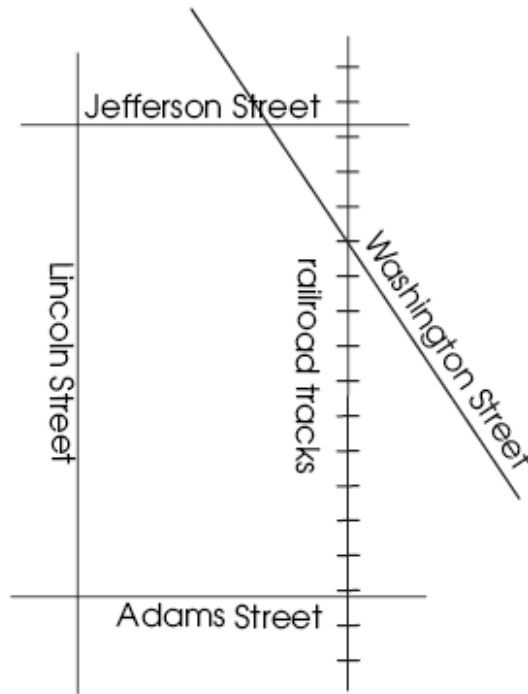


Which object (the bug, the rope, the lawn, the park) is best described as a point?

- A. bug
- B. rope
- C. lawn
- D. park

Question 26
Benchmark B
March 2006

A map of Andrew's neighborhood is shown. Andrew lives on the street that appears to be parallel to the railroad tracks.



On which street does Andrew live?

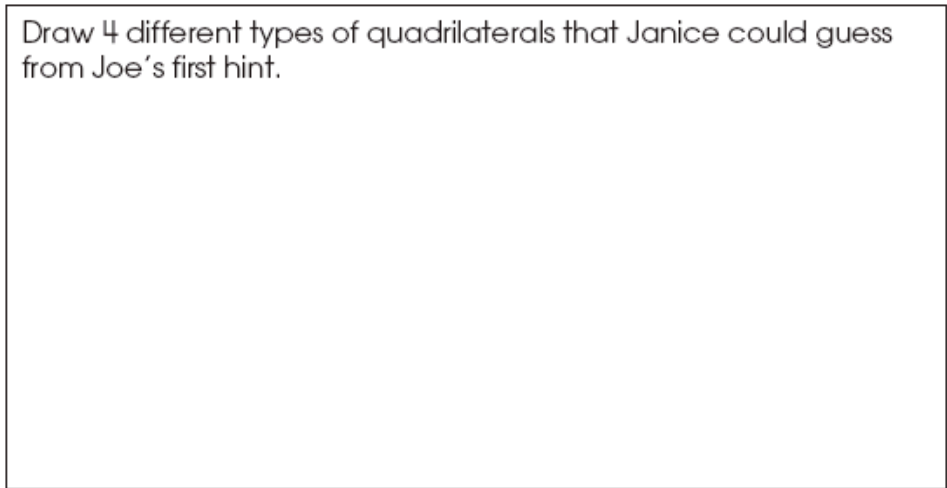
- A. Washington Street
- B. Lincoln Street
- C. Adams Street
- D. Jefferson Street

4th Grade Mathematics Ohio Achievement Test
Geometry & Spatial Standard

Question 10
Benchmark E
March 2008

Joe and Janice are playing a guessing game. Joe tells Janice that he is thinking of a quadrilateral with at least one pair of parallel sides.

Draw 4 different types of quadrilaterals that Janice could guess from Joe's first hint.

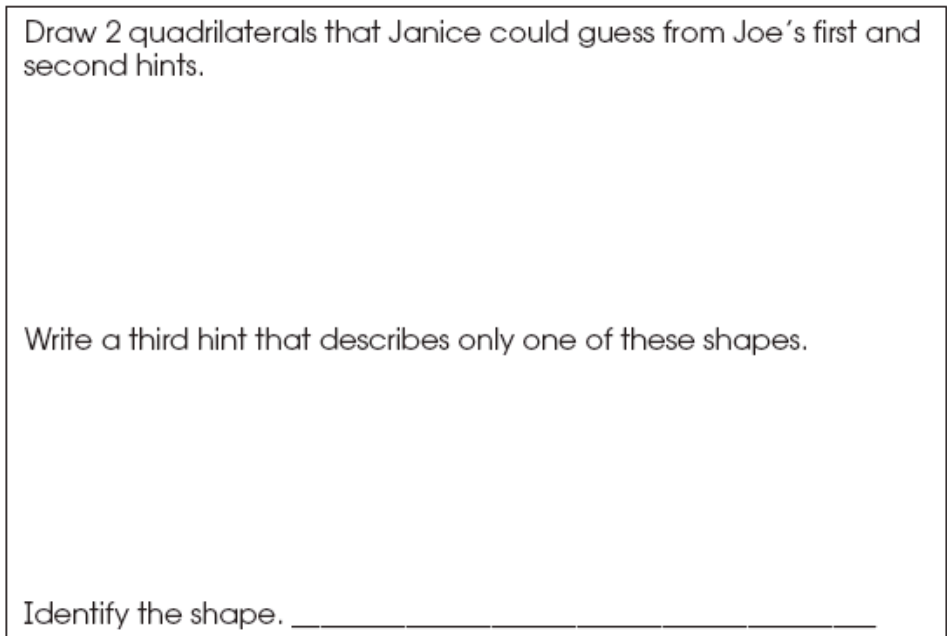


Then, Joe tells Janice that the figure has 4 right angles.

Draw 2 quadrilaterals that Janice could guess from Joe's first and second hints.

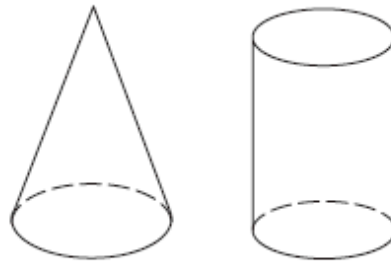
Write a third hint that describes only one of these shapes.

Identify the shape. _____



Question 5
Benchmark E
March 2006

A cone and a cylinder are shown.



Give one way that a cone and a cylinder are alike.

Give one way that a cone and a cylinder are different.

Question 43
Benchmark E
March 2006

The shapes shown are part of a design.



What do all these shapes appear to have in common?

- A. All have four right angles.
- B. All have at least one set of parallel sides.
- C. All have four equal angles.
- D. All have at least one set of perpendicular lines.

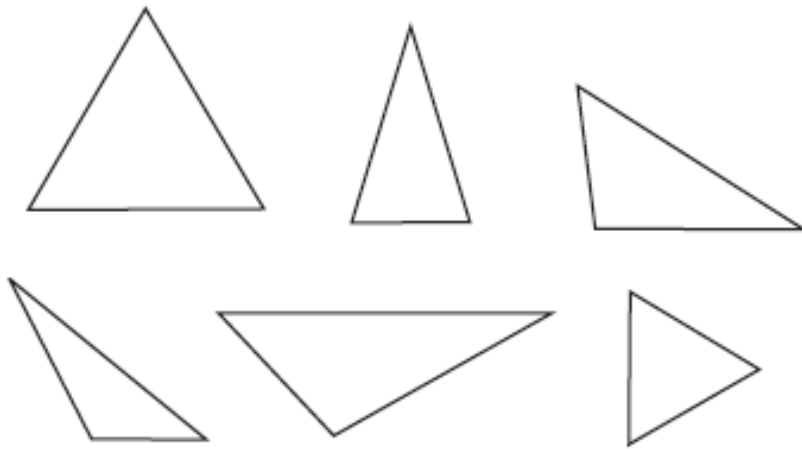
Question 44
Benchmark F
May 2009

Dakota was asked to draw a right equilateral triangle.

Use words or pictures to explain whether Dakota can draw a right equilateral triangle.

Question 38
Benchmark F
March 2006

Six triangles are shown.



Circle each triangle that appears to be scalene.

Explain how you decided which triangles are scalene.

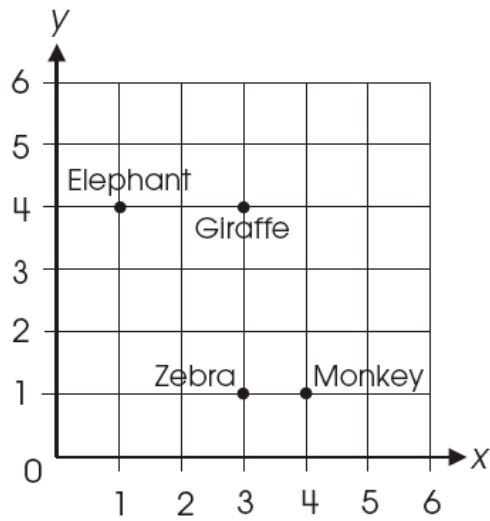
Question 34
Benchmark F
Spring 2007

How are a rhombus and a square alike?

- A. They both have four equal sides.
- B. They both have four right angles.
- C. They both have four equal angles.
- D. They both have only one pair of parallel sides.

Question 9
Benchmark G
May 2009

9. The coordinate grid shows the location of animals at the zoo.



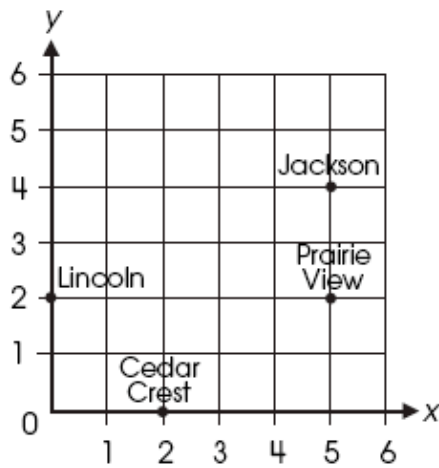
Which animal is located at (4, 1)?

- A. elephant
- B. giraffe
- C. monkey
- D. zebra

4th Grade Mathematics Ohio Achievement Test
Geometry & Spatial Standard

Question 18
Benchmark G
March 2006

Mr. Yang is driving to the school located at $(2, 0)$ on the coordinate grid.



Which school is located at $(2, 0)$?

- A. Cedar Crest
- B. Jackson
- C. Lincoln
- D. Prairie View

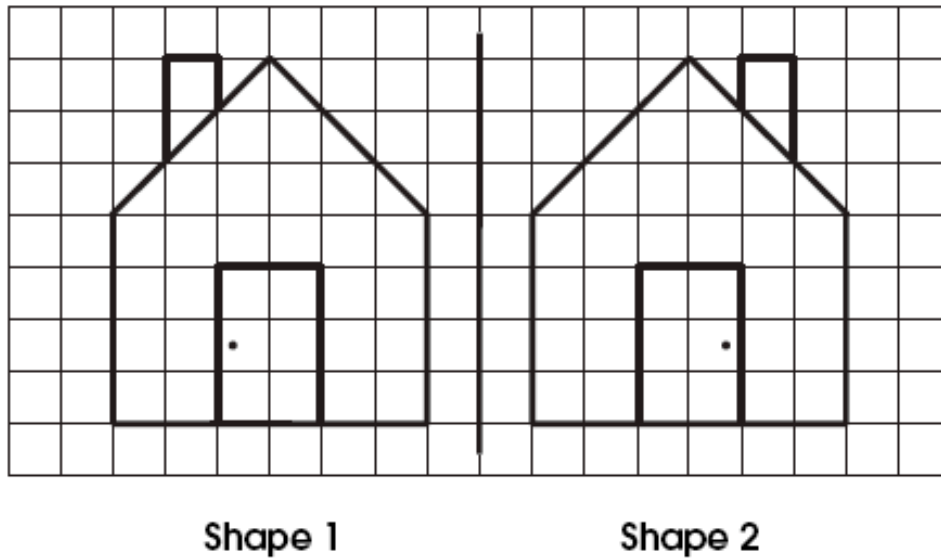
Question 31
Benchmark I
March 2008

Which pair of figures shows only a translation (slide)?



Question 31
Benchmark I
March 2006

The grid shows two shapes.

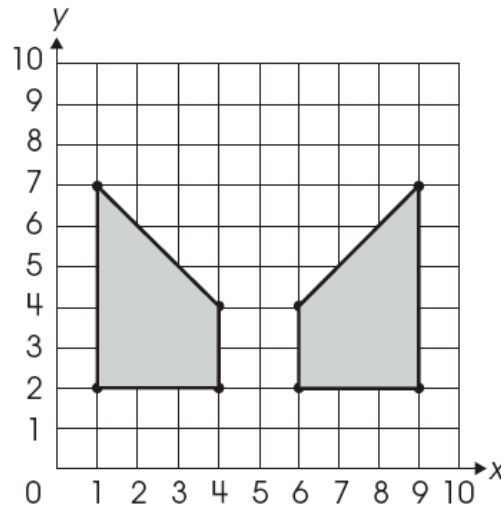


What transformation changed shape 1 to shape 2?

- A. rotation (turn)
- B. translation (slide)
- C. reflection (flip)
- D. no transformation

Question 38
Benchmark J
May 2009

William saw the two shapes drawn on a coordinate grid.



Which transformation could William use to determine whether the two shapes are congruent?

- A. a translation (slide)
- B. a reflection (flip)
- C. a rotation (turn) about a corner point
- D. The shapes are not congruent.

Question 24
Benchmark J
March 2008

Kevin has the two butterfly stickers shown.



Which transformation could he use to see whether the butterflies are congruent?

- A. translation (slide)
- B. rotation (turn) and translation (slide)
- C. reflection (flip)
- D. rotation (turn)

Question 5
Benchmark J
Spring 2007

Two triangles are drawn on the grid.



Which transformation — reflection (flip), translation (slide) or rotation (turn) — can Bill use to determine whether the two triangles are congruent? _____

Explain how this transformation shows Bill that the two triangles are congruent.