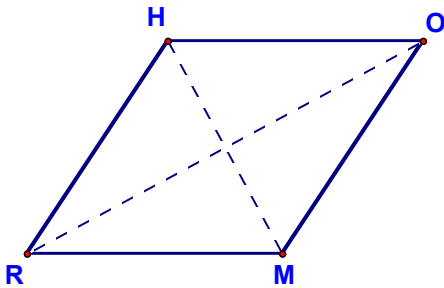


1.

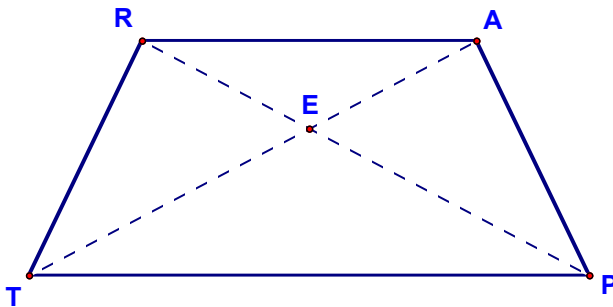
Examine the rhombus. Which of the following statements appear to be true?



- a. All four sides are congruent
- b. The diagonals are \perp
- c. The diagonals bisect the \angle s
- d. The diagonals bisect each other
- e. The diagonals are \cong

2.

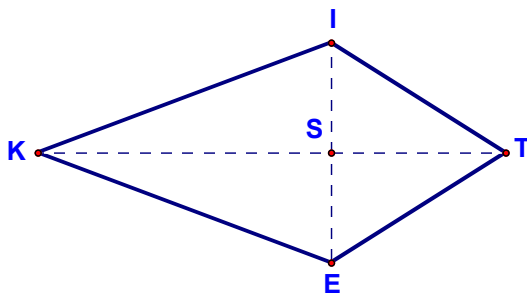
Examine the isosceles trapezoid. Which of the following statements appear to be true?



- a. The opposite sides are \cong
- b. Opposite sides are \parallel
- c. The diagonals bisect the \angle s
- d. The diagonals bisect each other
- e. The diagonals are \cong

3.

Examine the Kite. Which of the following statements appear to be true?



- a. The opposite sides are \cong
- b. Opposite sides are \parallel
- c. The diagonals bisect the \angle s
- d. The diagonals bisect each other
- e. The diagonals are \cong
- f. The diagonals are \perp

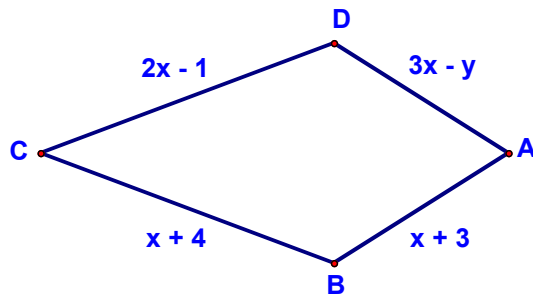
8.

Examine each statement below. If the statement is always true, write A; if sometimes true, write S; if never true, write N.

- a. A square is a rhombus
- b. A rhombus is a square
- c. A kite is a parallelogram
- d. A rectangle is a polygon
- e. A polygon has the same number of vertices as sides
- f. A parallelogram has three diagonals
- g. A trapezoid has three bases

16.

ABCD is a kite



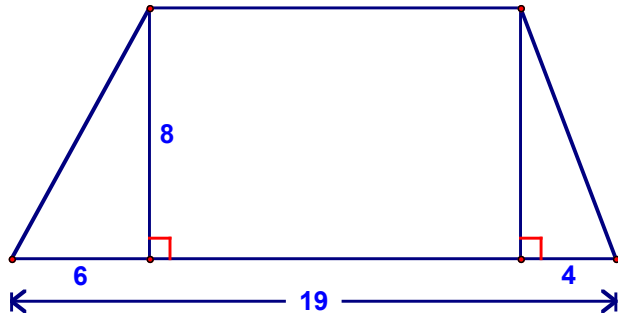
- a. Solve for x and y

- b. What is the perimeter of the kite?

- c. Is it possible for \overline{AC} to be 19 units long? Why or why not?

19.

The trapezoidal region is actually the union of two triangles and a rectangle. Find the area of the trapezoid.



20.

How many rectangles are shown in the figure below in which all of the angles are right angles?

