

Geometry  
6.6 – Trapezoids

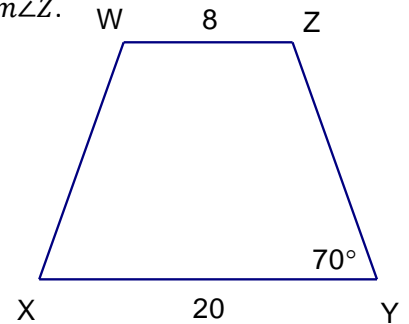
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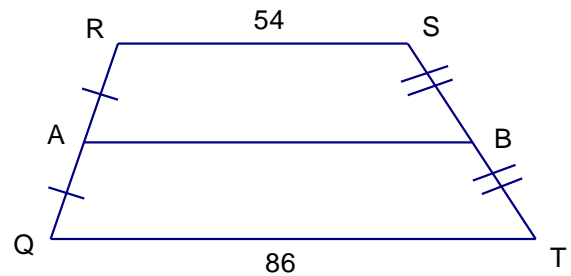
1. Which of the following can a trapezoid have?

- A) Congruent bases
- B) Diagonals that bisect each other
- C) Exactly two congruent sides
- D) A pair of congruent opposite angles
- E) Exactly three congruent angles

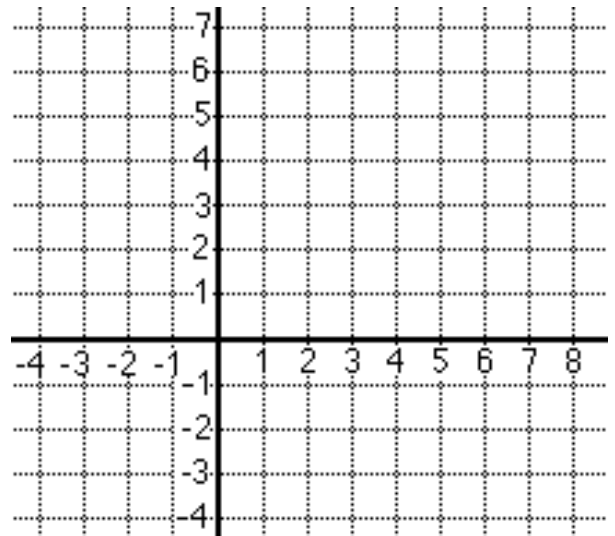
2. For isosceles trapezoid  $XYZW$ , find the length of the median,  $m\angle W$ , and  $m\angle Z$ .



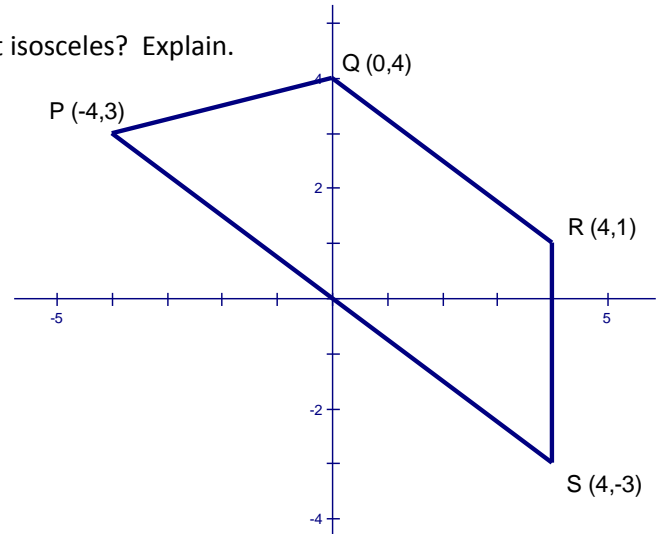
3. Let  $\overline{GH}$  be the median of  $RSBA$  Find  $GH$ .



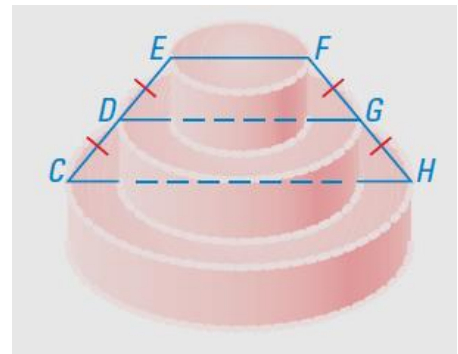
4. Determine whether the quadrilateral with vertices at  $B(1,2)$ ,  $C(4,4)$ ,  $D(5,1)$ ,  $E(2,-1)$  is a trapezoid, parallelogram, square, rectangle, or rhombus. Choose the most specific term. Explain.



5. Determine whether the figure is a trapezoid. If so, is it isosceles? Explain.



6. A baker is making a cake like the one at below. The top layer has a diameter of 8 inches and the bottom layer has a diameter of 20 inches. What is the diameter of the middle layer?



7. In the trapezoid at right,  $NP = 15$ . What is the value of  $x$ ?

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

