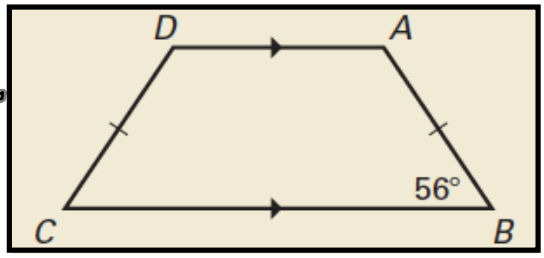
Bellwork
02/01/2012

1. Find $m\angle A$, $m\angle C$, and $m\angle D$.

$m\angle C = 56°$

$m\angle A = 124°$

$m\angle D = 124°$

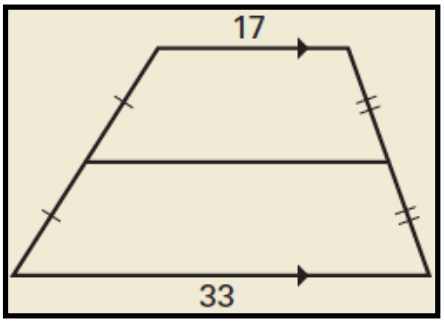


2. Find the length of the midsegment of the trapezoid.

$\frac{1}{2}(17+33)$

$\frac{1}{2}(50)$

25



Geometry
8.6 Identify Special Quadrilaterals
Standard(s): 3, 9

Vocabulary:

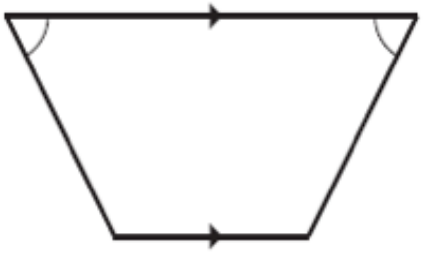
Properties of Quadrilaterals

Copy the chart. Put an X in the box if the shape *always* has the given property.

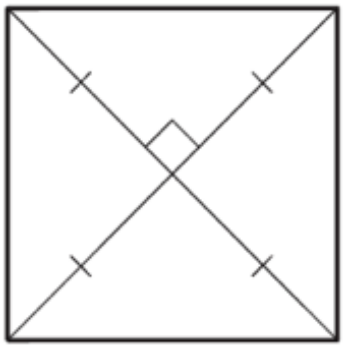
Property	▱	Rectangle	Rhombus	Square	Kite	Trapezoid
All sides are ≅.			X	X		
Both pairs of opp. sides are ≅.	X	X	X	X		
Both pairs of opp. sides are ∥.	X	X	X	X		
Exactly 1 pair of opp. sides are ∥.						X
All ∡s are ≅.		X		X		
Exactly 1 pair of opp. ∡s are ≅.					X	
Diagonals are ⊥.			X	X	X	
Diagonals are ≅.		X		X		
Diagonals bisect each other.	X	X	X	X		

Classifying Quadrilaterals

Give the most specific name for the quadrilateral. *Explain*.



Isosceles Trap.
1) 1 pair of ∥ lines
2) 1 pair of ≅ base ∠'s

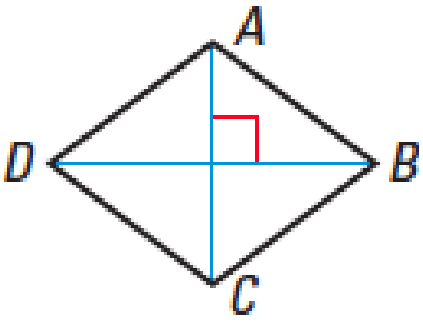


Square
1) congruent diagonals (rectangle)
2) ⊥ diagonals (rhombus)

Identifying Quadrilaterals

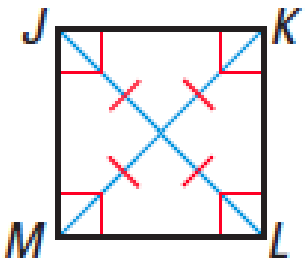
Tell whether enough information is given in the diagram to classify the quadrilateral by the indicated name. *Explain*.

RHOMBUS



No, it could a kite, but we don't have enough info about the sides

SQUARE

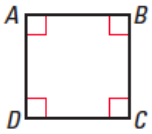


No, we don't have enough info about diagonals or sides.

Developing a Proof

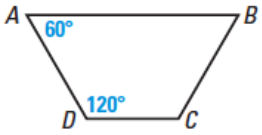
Which pairs of segments or angles must be congruent so that you can prove that ABCD is the indicated quadrilateral? *Explain*. There may be more than one right answer.

Square

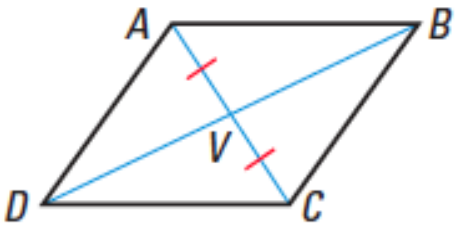


$\overline{AB} \cong \overline{BC} \cong \overline{CD} \cong \overline{DA}$ (rhombus)
$\overline{AC} \cong \overline{BD}$ (rectangle)

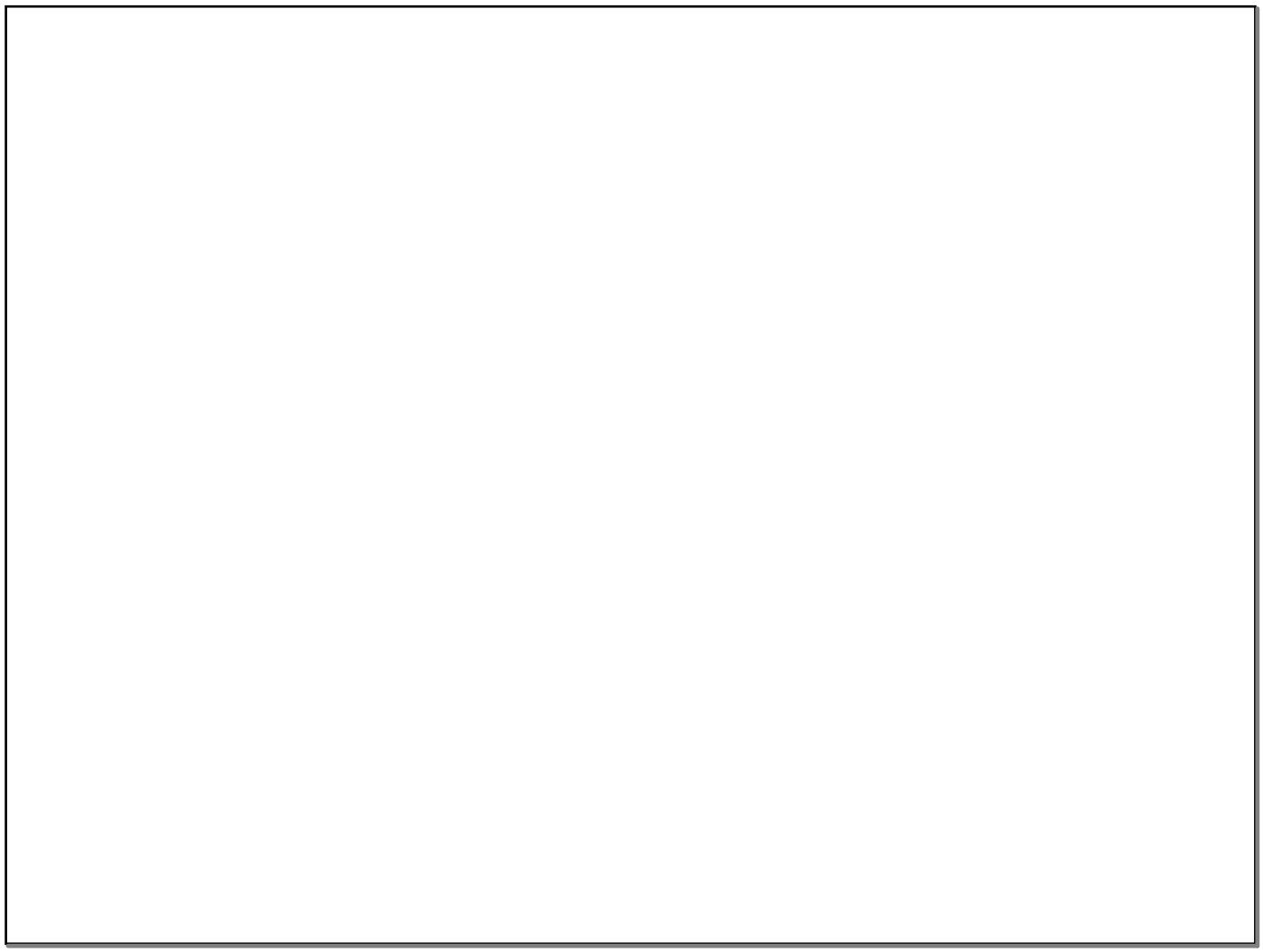
Isosceles Trapezoid



Parallelogram



$\overline{DV} \cong \overline{VB}$, Thm 8.10

Homework Assignment

Worksheet 8.6B