

Quadrilaterals - Parallelograms

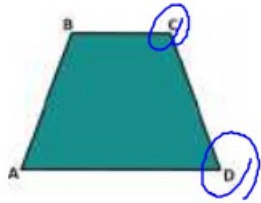
\_\_\_\_\_ four \_\_\_\_\_  
 4 - Sided \_\_\_\_\_ polygon.  
 k \_\_\_\_\_ one \_\_\_\_\_ letter (vertex), then name them off  
 \_\_\_\_\_ order.



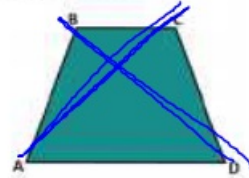
LUA

\_\_\_\_\_ iter \_\_\_\_\_ the other.

Consecutive vertices:



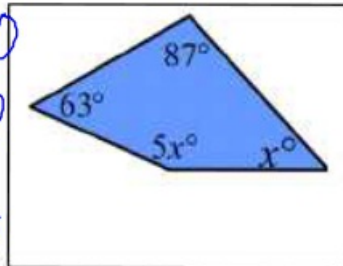
Diagonals



al add up to \_\_\_\_\_  $360^\circ$



$$\begin{aligned} -x + 40 &= 360 \\ 220 &= 360 \\ 20 &- 220 \\ \hline &= 140 \end{aligned}$$



$$\begin{aligned} 87 + 63 + 5x &= \\ 6x + 150 &= \\ - 150 &- \\ \hline 6x &= 2 \\ \frac{6}{6} &\frac{2}{6} \\ x &= 3\frac{2}{3} \end{aligned}$$

Parallelogram	Rectangle	Square	Rhombus
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Quadrilaterals

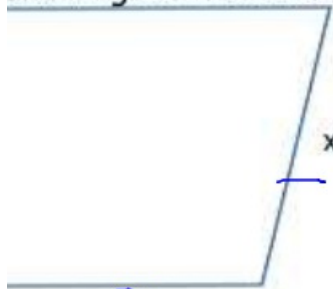
Quadrilaterals for which the statements are true.

- a) Opposite sides are parallel.
  - b) The diagonals bisect the angles.
  - c) The diagonals are perpendicular.
- Square  
 Rhombus
- Square  
 Rhombus

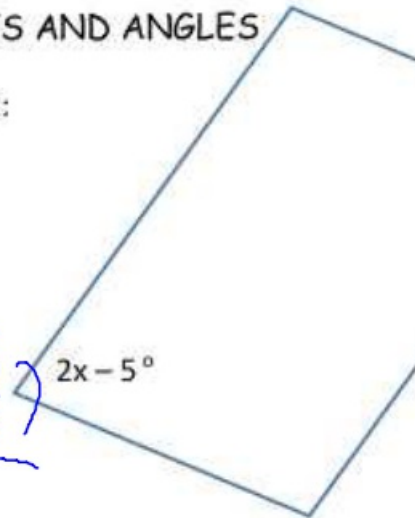
Quadrilaterals for which the statements are true:

- a) Opposite sides are parallel.
  - b) Both pairs of opposite sides are congruent.
  - c) Opposite angles are congruent.
  - d) All sides are congruent.
- Square
- All
- Square & Rhombus
- Square & Rhombus

and Angles in a Parallelogram: SIDES AND ANGLES



Ex2:

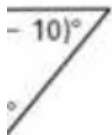


$$\begin{array}{r} +20 \\ -20 \\ \hline \end{array}$$

$$\begin{array}{r} 2x - 5 = 105 \\ +5 \quad +5 \\ \hline \end{array}$$

$$\frac{2x}{2} = \frac{110}{2}$$

$$x = 55$$

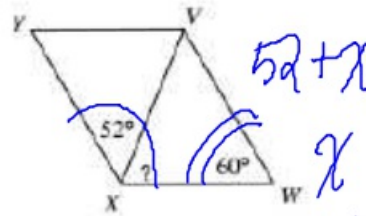


$$= 180$$

$$\frac{17x}{17} = \frac{204}{17}$$

$$x = 12$$

Ex4:

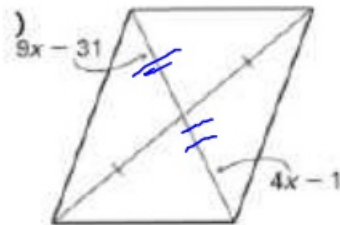


and Angles in a Parallelogram: DIAGONALS

bisect

= 30  
id NL

Ex6:



$$\begin{array}{r} 9x - 31 = 4x - 1 \\ -4x \quad -4x \\ \hline \end{array}$$

$$\begin{array}{r} 5x - 31 = -1 \\ +31 \quad +31 \\ \hline \end{array}$$

$$\frac{5x}{5} = \frac{30}{5}$$

$$x = 6$$