

Characteristics of Special Quadrilaterals

Parallelogram: both pairs of opposite sides are parallel

Rhombus: a Parallelogram with 4 \cong sides

Rectangle: a Parallelogram with 4 right angles

Square: a Parallelogram with 4 \cong sides and 4 right angles

Kite: a Quadrilateral with two pairs of adjacent sides that are congruent and no opposite sides are congruent.

Trapezoid: a Quadrilateral with exactly one pair of parallel sides (bases)

Isosceles Trapezoid: a Trapezoid whose nonparallel sides are congruent (legs)

Geometry Bellwork Friday, March 28, 2014

1. Use slope and distance to find the best name for quadrilateral ABCD?

A(5, 0) B(3, -4)

Slope

$$AB = \frac{2}{1}$$

$$BC = -\frac{1}{2}$$

$$CD = \frac{2}{1}$$

$$DA = -\frac{1}{2}$$

C(-9, 2) D(-7, 6)

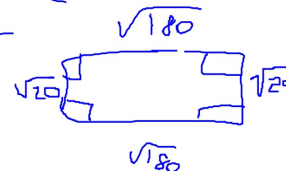
Distance

$$\sqrt{20}$$

$$\sqrt{80}$$

$$\sqrt{20}$$

$$\sqrt{80}$$



Four right angles
and only opp sides
are congruent

2. Use slope and distance to find the best name for quadrilateral EFGH?

E(2, -5)

F(-14, -7)

G(-6, 7)

H(10, 9)

Rhombus

Parallelogram with
4 \cong and no right
angles

	Slope	dist
EF	$1/8$	$\sqrt{260}$
FG	$7/4$	$\sqrt{260}$
GH	$1/8$	$\sqrt{260}$
HE	$7/4$	$\sqrt{260}$

