

Name: _____

Hour: _____

Classify all that apply for quadrilateral ABCD if:

Slopes

$$\text{Slope AB} = \frac{2}{4} = \boxed{\frac{1}{2}}$$

$$\text{Slope BC} = -\frac{4}{2} = \boxed{-2}$$

$$\text{Slope CD} = \frac{2}{4} = \boxed{\frac{1}{2}}$$

$$\text{Slope AD} = \frac{-4}{2} = \boxed{-2}$$

Distances

$$AB^2 = 4^2 + 2^2$$

$$AB = \sqrt{20}$$

$$\boxed{AB = 2\sqrt{5}}$$

$$4^2 + 2^2 = AD^2$$

$$\boxed{AD = 2\sqrt{5}}$$

$$4^2 + 2^2 = BC^2$$

$$\boxed{BC = 2\sqrt{5}}$$

$$4^2 + 2^2 = CD^2$$

$$\boxed{CD = 2\sqrt{5}}$$

ABCD is a parallelogram because opposite sides are //

ABCD is a rectangle because we have 4 right angles

ABCD is a rhombus because we have 4 \cong sides

ABCD is a square because we have 4 right \angle s and 4 \cong sides

Most specific classification: square