13.11 Quadrilaterals Day 3 Practice

Find the slope of the sides and diagonals of the following quadrilaterals. Then using the properties of quadrilaterals, determine if it is a rhombus, rectangle, or square.

1) Type of quad: ______

Slope of sides:

AB _____

<u>BC</u> _____

<u>CD</u> _____

 \overline{DA}

Slope of

diagonals: *AC* _____

 \overline{BD}

3) Type of quad: _____

Slope of sides:

 \overline{AB} _____

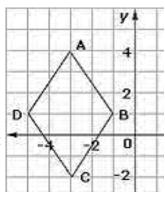
BC _____

<u>CD</u> _____

 \overline{DA}

Slope of diagonals:

AC _____ <u>BD</u> _____



5) Type of quad: _____

Slope of sides:

AB _____

BC _____

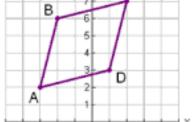
 \overline{CD} \overline{DA}

Slope of

diagonals:

AC _____

 \overline{BD} _____



Type of quad: _____

Slope of sides:

 \overline{AB} *BC* _____

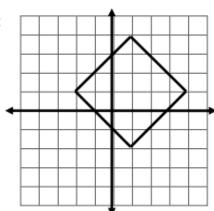
<u>CD</u> _____

 \overline{DA} _____

Slope of

diagonals: *AC* _____

BD _____



Type of quad: ______

Slope of sides:

 \overline{AB}

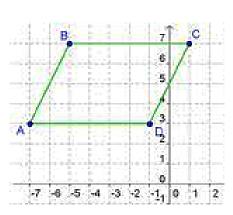
BC _____

<u>CD</u> _____ *DA* _____

Slope of diagonals:

AC _____ \overline{BD}

6) Type of quad: _____



Slope of sides:

AB _____ *BC* _____

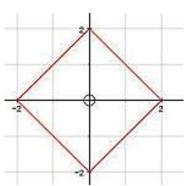
 \overline{CD} _____

 \overline{DA}

Slope of diagonals:

AC _____

 \overline{BD}



Use the following information to classify each quadrilateral as a square, rectangle, rhombus, parallelogram, or just a generic quadrilateral.

7)

Classify quadrilateral BEAR, where:

Slope of
$$\overline{BE} = \frac{1}{3}$$

Length of
$$\overline{BE} = \sqrt{10}$$

Slope of
$$\overline{EA} = -3$$

Length of
$$\overline{EA} = \sqrt{10}$$

Slope of
$$\overline{AR} = \frac{1}{3}$$

Length of
$$\overline{AR} = \sqrt{10}$$

Slope of
$$\overline{BR} = -3$$

Length of
$$\overline{BR} = \sqrt{10}$$

8)

Classify quadrilateral OHMY, where:

Slope of
$$\overline{OH} = -\frac{1}{3}$$

Length of
$$\overline{OH} = \sqrt{10}$$

Slope of
$$\overline{HM} = -3$$

Length of
$$\overline{HM} = 2\sqrt{10}$$

Slope of
$$\overline{MY} = -\frac{1}{3}$$

Length of
$$\overline{MY} = \sqrt{10}$$

Slope of
$$\overline{OY} = -3$$

Length of
$$\overline{OY} = 2\sqrt{10}$$

9)

Classify quadrilateral WZRD, where:

Slope of
$$\overline{WZ} = 0$$

Length of
$$\overline{WZ} = 5$$

Slope of
$$\overline{ZR} = -\frac{4}{3}$$

Length of
$$\overline{ZR} = 5$$

Slope of
$$\overline{RD} = 0$$

Length of
$$\overline{RD} = 5$$

Slope of
$$\overline{WD} = -\frac{4}{3}$$

Length of
$$\overline{WD} = 5$$

10)

Classify quadrilateral AHSZ, where:

Slope of
$$\overline{AH} = \frac{1}{4}$$

Length of
$$\overline{AH} = \sqrt{17}$$

Slope of
$$\overline{SZ} = \frac{6}{7}$$

Length of
$$\overline{SZ} = \sqrt{85}$$

Slope of
$$\overline{HS} = -4$$

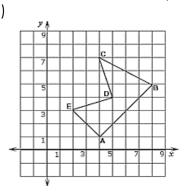
Length of
$$\overline{HS} = \sqrt{17}$$

Slope of
$$\overline{ZA} = \frac{9}{2}$$

Length of
$$\overline{ZA} = \sqrt{85}$$

Find the distance between points A and B.

11)



12)

