Rhombi and Squares Proofs   Name: _____
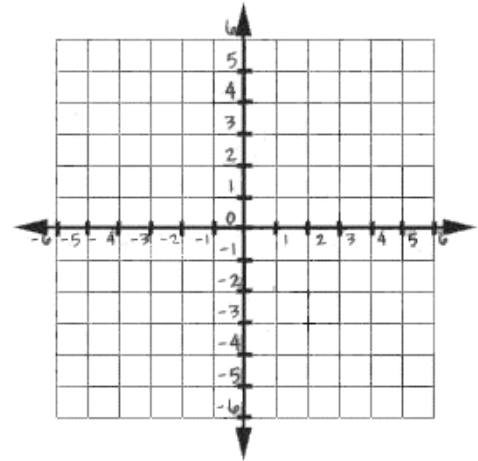

Directions: Identify the Quadrilateral PQRS, with the given points. SHOW ALL WORK!!!

1) Plot Quadrilateral PQRS: P(1, 1) Q(4, 3) R(6, 0) S(−3, −2)

2) What shape does it appear to be?

3) What do you have to show?

4) Check off all that apply:

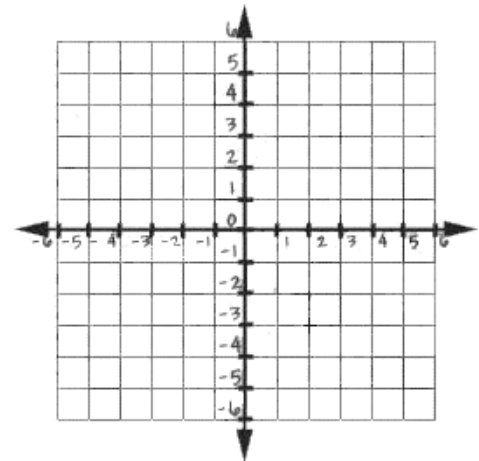| |
|---|
| _____opposite sides parallel |
| _____consecutive sides perpendicular |
| _____four congruent sides |
| _____Only 1 pair of opposite sides parallel |
| _____ Congruent legs |
| _____ two pairs of congruent sides (consecutive) |

5) Which shape is it? _____

6) Why?

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7) Plot Quadrilateral PQRS: P(1, 2), Q(6, 2), R(3, −2), & S(−2, −2).

8) What shape does it appear to be?

9) What do you have to show?

10) Check off all that apply:

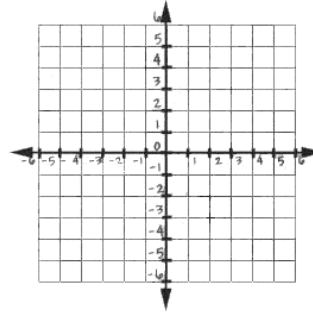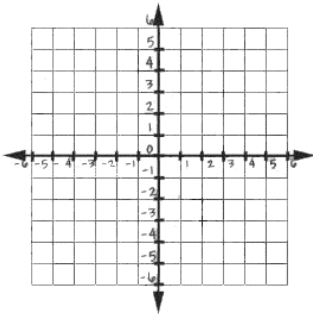| |
|---|
| _____opposite sides parallel |
| _____consecutive sides perpendicular |
| _____four congruent sides |
| _____Only 1 pair of opposite sides parallel |
| _____ Congruent legs |
| _____ two pairs of congruent sides (consecutive) |

11) Which shape is it? _____

12) Why?

Directions: State the ordered pair that is needed to make the following figure.

13) Rhombi ABCD when A(–11, 0), B(–1, 0), C(8, 6)   14) Square ABCD when A(0, 4), B(1, 1), C(4, 2)
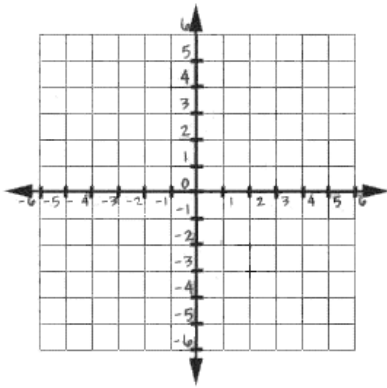
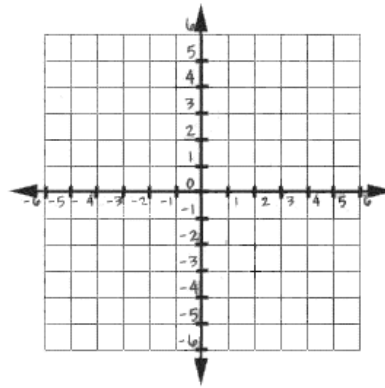**Directions: Complete each proof.**

15) Prove 2 different ways that ABCD is a rhombus when A(1, 3), B(–3, 0), C(0, –4), and D(4, –1).

1st Proof: 2nd Proof:

16) Is ABCD in question #15 a square? Justify your answer with an informal proof.