

1. List the properties of the following figures:

a) parallelogram

- Opposite sides parallel
- _____
- _____
- _____
- _____

b) rectangle-properties of a parallelogram +

- Definition: _____
- _____

c) rhombus-properties of a parallelogram+

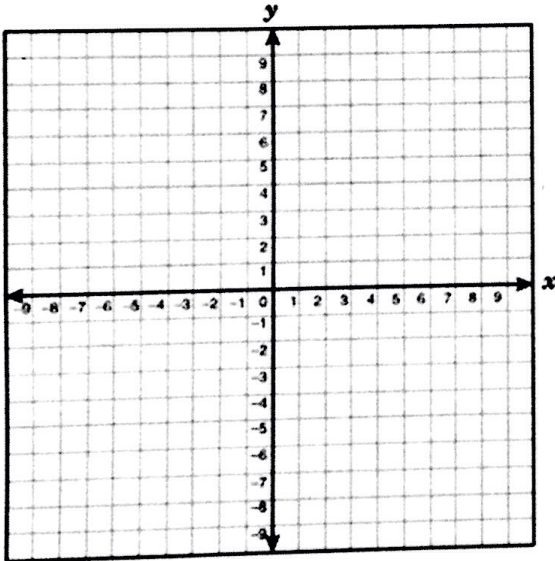
- Definition: _____
- _____
- _____

d) square

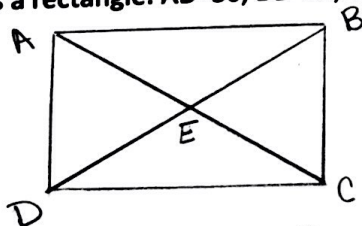
- All properties of a _____ and _____.

2) Use the diagonals to determine if the parallelogram is a rectangle, rhombus, or square.

A(-4, -2) B(-2, 4) C(4, 2) D(2, -4)



ABCD is a rectangle. $AD=30$, $DB=26$, $m\angle BAE = (3x + 2)$, $m\angle DCE = (6x - 7)$. Find each of the following measures.



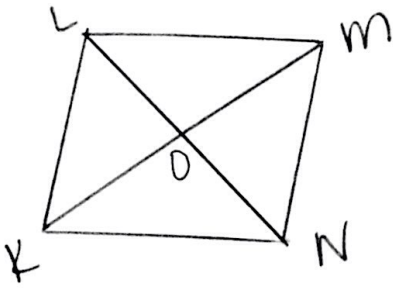
3) AE

4) $m\angle ADC$

5) $m\angle BAE$

6) BC

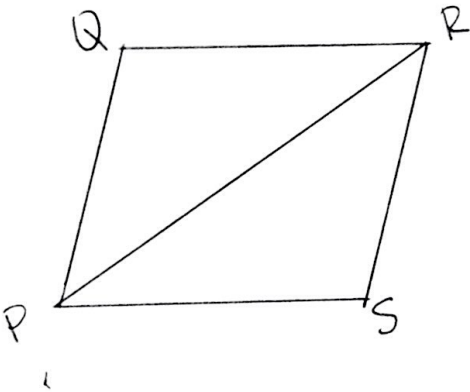
25. Write a 2 column proof



Given: KLMN is a parallelogram

Prove: $\triangle LOM \cong \triangle NOK$

26. Write a 2 column proof



Given: PQRS is a parallelogram

Prove: $\triangle PQR \cong \triangle RSP$

27. Prove the following quadrilateral with vertices A(-3, -3) B(1, 1) C(5, -1) and D(1, -5) is a parallelogram

