Name : _____ Score : _____

Distance Formula - Quadrilaterals

Sheet 3

1) Show that the points E(–3, –5), F(–5, –4), G(–7, –5) and H(–5, –6) are the vertices of a rhombus.

2) Show that the points a parallelogram.

3) Show that the points ces of a square.

4) Show that the points K(–9, 7), L(–2, 7), M(–2, 9) and N(–9, 9) are the vertices of a rectangle.

Name : _____ Score : _____

Answer key

Distance Formula - Quadrilaterals

Sheet 3

1) Show that the points E(–3, –5), F(–5, –4), G(–7, –5) and H(–5, –6) are the vertices of a rhombus.

EF = FG = GH = HE = $\sqrt{5}$ units

EG = 4 units ; FH = 2 units

Four sides are equal and diagonals are not equal.

The points E(–3, –5), F(–5, –4), G(–7, –5) and H(–5, –6) form a rhombus.

2) Show that the points a parallelogram.

SV = TU = 6 ur

SU = $\sqrt{34}$ units

Opposite sides

The points S(2, m.

3) Show that the points ces of a square.

PQ = QR = RS

PR = QS = $\sqrt{50}$

Four sides are e

The points P(4, .

4) Show that the points K(–9, 7), L(–2, 7), M(–2, 9) and N(–9, 9) are the vertices of a rectangle.

KL = MN = 7 units ; LM = KN = 2 units

KM = LN = $\sqrt{53}$ units

Opposite sides are equal and diagonals are also equal.

The points K(–9, 7), L(–2, 7), M(–2, 9) and N(–9, 9) form a rectangle.