Name : _____ Score : _____

Distance Formula - Triangles

Sheet 4

1) Show that the points X(–6, –6), Y(6, 6) and Z($-6\sqrt{3}$, $6\sqrt{3}$) form an equilateral triangle.

2) Show that the points ngle.

3) Prove that the points osceles triangle.

4) Show that the points U(–9, 1), V(–3, 1) and W(–9, 5) are the vertices of a right triangle.

Name : _____ Score : _____

Answer key

Sheet 4

Distance Formula - Triangles

1) Show that the points X(–6, –6), Y(6, 6) and Z($-6\sqrt{3}$, $6\sqrt{3}$) form an equilateral triangle.

XY = $\sqrt{288}$ units ; YZ = $\sqrt{288}$ units ; ZX = $\sqrt{288}$ units

XY = YZ = ZX

The points X(–6, –6), Y(6, 6) and Z($-6\sqrt{3}$, $6\sqrt{3}$) form an equilateral triangle.

2) Show that the points ngle.

AB = $\sqrt{25}$ unit

AB ≠ BC ≠ CA

The points A(–8 le.

3) Prove that the points osceles triangle.

QR = $\sqrt{16}$ unit

RS = SQ

The points Q(3, e.

4) Show that the points U(–9, 1), V(–3, 1) and W(–9, 5) are the vertices of a right triangle.

UV = $\sqrt{36}$ units ; VW = $\sqrt{52}$ units ; WU = $\sqrt{16}$ units

UV^2 = 36 units ; VW^2 = 52 units ; WU^2 = 16 units

$UV^2 + WU^2 = VW^2$

The points U(–9, 1), V(–3, 1) and W(–9, 5) form a right triangle.