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 \(U(-9, 1), V(-3, 1)\) and \(W(-9, 5)\) are the vertices of a right triangle.

3) Prove that the points \(Q(3, -6), R(7, -6)\) and \(S(5, -2)\) are the vertices of an isosceles triangle.

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

\[ XY = \sqrt{288} \text{ units} ; \quad YZ = \sqrt{288} \text{ units} ; \quad ZX = \sqrt{288} \text{ units} \]

\[ XY = YZ = ZX \]

The points X(–6, –6), Y(6, 6) and Z(–6, 6) form an equilateral triangle.

2) Show that the points A(–8, –2), B(–8, –7) and C(–2, –7) form a scalene triangle.

3) Prove that the points Q(3, –6), R(7, –6) and S(5, –2) are the vertices of an isosceles triangle.

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

\[ UV = \sqrt{36} \text{ units} ; \quad VW = \sqrt{52} \text{ units} ; \quad WU = \sqrt{16} \text{ units} \]

\[ UV^2 = 36 \text{ units} ; \quad VW^2 = 52 \text{ units} ; \quad WU^2 = 16 \text{ units} \]

\[ UV^2 + WU^2 = VW^2 \]

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