

Answer on Question #42420 - Math – Analytic Geometry

Question: Given that P = (5, 9) and Q = (13, 12), find the component form and magnitude of vector PQ.

Answer:

Component form:

$$\overrightarrow{PQ} = (13 - 5, 12 - 9) = (8, 3)$$

Magnitude:

$$\|\overrightarrow{PQ}\| = \sqrt{8^2 + 3^2} = \sqrt{64 + 9} = \sqrt{73}$$