

Answer on Question #67857 – Math – Geometry

Question

Find the magnitude of vector $A = 3i - 2j + 2k$.

(a) 1 (b) 5 (c) 3 (d) 2.

Solution

Using general formula of the magnitude of the vector (see http://wwwf.imperial.ac.uk/metric/metric_public/vectors/vectors/magnitude.html) we obtain

$$|A| = \sqrt{3^2 + (-2)^2 + 2^2} = \sqrt{9 + 4 + 4} = \sqrt{17}.$$

Answer: $\sqrt{17}$.