

Vector Algebra

Question1

If the component of the vector **A** along the vector **B** is twice the component of **B** along **A**, then the ratio of magnitudes of vectors **A** and **B** is

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Options:

A.

1 : 2

B.

3 : 2

C.

2 : 1

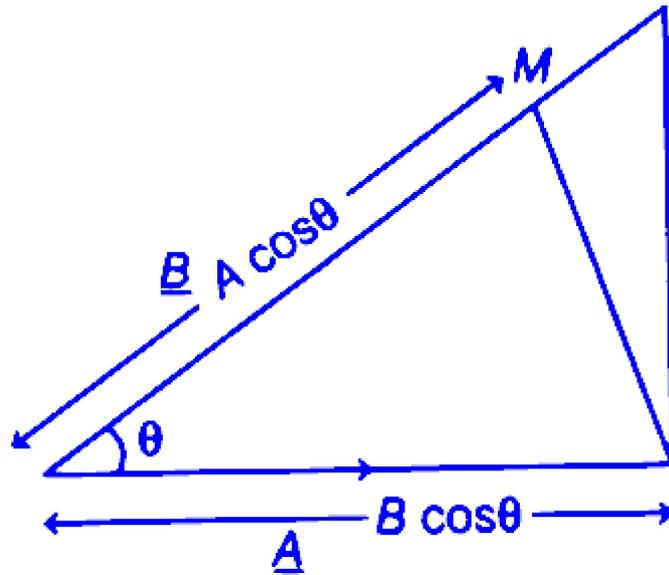
D.

3 : 1

Answer: C

Solution:





According to question,

$$A \cos \theta = 2B \cos \theta$$

$$A = 2B$$

$$\Rightarrow \frac{A}{B} = \frac{2}{1} \Rightarrow A : B = 2 : 1$$
