1 B slide 12

Suppose a vector is represented by an ordered pair (*R*, θ) where *R* is the magnitude and θ is the angle measured from the positive +X axis to the vector in the anticlockwise direction.

Given a set of vectors find the total X component and total Y component for the sum of the four vectors.

2 D slide 13

The X component and the Y component of a vector are √3 and -1 respectively.

3 D

Pat can row a boat with a speed of 4.0 m.s-1 in still water. If Pat wants to cross a river flowing at 2 m.s-1, find the direction Pat must row so as to reach point on the other bank directly opposite to the starting point.

A 30o to the bank heading upstream

B 60o to the bank heading downstream

C 30o to the bank heading downstream

D 60o to the bank heading upstream

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