

(EPC02-NE-01E)

- A vector whose magnitude is one is known as
  - A) A free vector
  - B) A unit vector
  - C) Position vector
  - D) A null vector

(EPC02-NE-02E)

- If a vector is divided by its magnitude, we get
  - A) A unit vector
  - B) A null vector
  - C) Position vector
  - D) A free vector

(EPC02-NE-03E)

- A vector which can be displaced parallel to itself and applied at any point, is known as
  - A) A null vector
  - B) A unit vector
  - C) Position vector
  - D) A free vector

(EPC02-NE-04E)

- Negative vector  $-A$  as compared with vector  $A$  has
  - A) Same magnitude
  - B) Opposite direction
  - C) Same direction
  - D) Both A & B



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(EPC02-NE-05M)

- If the resultant of two vectors each of magnitudes  $F$  is also of magnitude  $F$ , the angle between them will be
  - A)  $90^\circ$
  - B)  $60^\circ$
  - C)  $30^\circ$
  - D)  $120^\circ$

(EPC02-NE-06E)

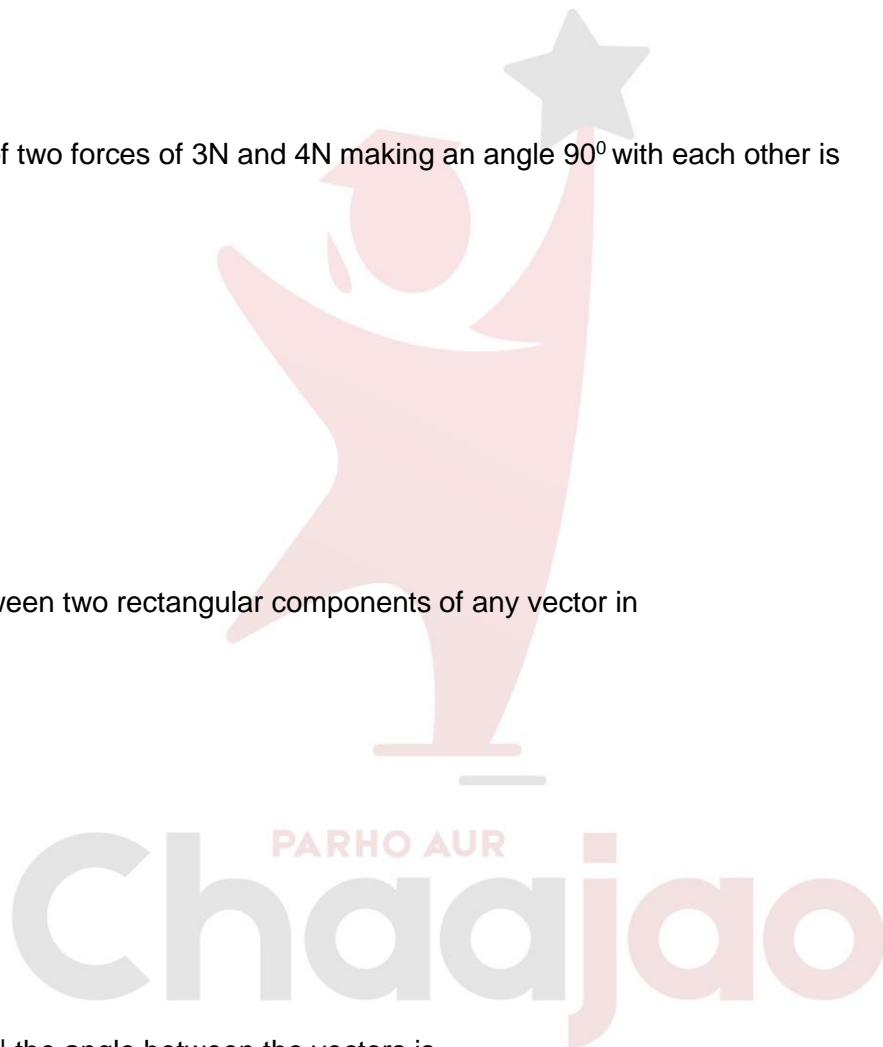
- The resultant of two forces of  $3\text{N}$  and  $4\text{N}$  making an angle  $90^\circ$  with each other is
  - A)  $1\text{N}$
  - B)  $7\text{N}$
  - C)  $5\text{N}$
  - D)  $10\text{N}$

(EPC02-NE-07E)

- The angle between two rectangular components of any vector in
  - A)  $90^\circ$
  - B)  $60^\circ$
  - C)  $30^\circ$
  - D)  $120^\circ$

(EPC02-NE-08M)

- If  $|A + B| = |A - B|$  the angle between the vectors is
  - A)  $0^\circ$
  - B)  $45^\circ$
  - C)  $60^\circ$
  - D)  $90^\circ$



(EPC02-NE-09E)

- A force of magnitude 30N, making an angle of  $60^\circ$  with x-axis, its X component will be,  
A) 7N  
B) 15N  
C) 5N  
D) 10N

(EPC02-NE-10E)

- The direction of the vector A when X and Y components are given  
A)  $\theta = \tan^{-1}(A_y/A_x)$   
B)  $\theta = \tan^{-1}(A_x/A_y)$   
C)  $\theta = \tan^{-1}(X/Y)$   
D) None of these

(EPC02-NE-11M)

- The property  $A \cdot B = B \cdot A$  in Scalar product is called  
A) Commutative property  
B) Associative property  
C) Multiplication inverse  
D) Additive inverse

(EPC02-NE-12M)

- Which of the following is correct  
A)  $i \cdot j = k$   
B)  $i \cdot j = 1$   
C)  $i \cdot j = 0$   
D)  $i \cdot j = i$



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(EPC02-NE-13E)

- The Scalar product of vectors  $A = 2i + 5k$  and  $B = 3j + 4k$  is
  - A) 26
  - B) 23
  - C) 15
  - D) 20

(EPC02-NE-14M)

- The angle between the two vectors  $-2i + 3j + k$  and  $i + 2j - 4k$  is
  - A)  $0^\circ$
  - B)  $90^\circ$
  - C)  $180^\circ$
  - D) None of the above

(EPC02-NE-15E)

- Which of the following is true
  - A)  $A \times B = B \times A$
  - B)  $A \times B = -B \times A$
  - C)  $A \times B = C \times B$
  - D)  $A \times B = C \times A$



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Answer key	
1	B
2	A
3	D
4	D
5	D
6	C
7	A
8	D
9	B
10	A
11	A
12	C
13	D
14	B
15	B