MTH282
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1. A vector whose magnitude is unit is called ____

--->> unit vectors

equal vectors

like vectors

unlike vectors

2. Suppose that the coordinates of R be (3,4,12), what is \((OR)\) Ã¢Æ'â€"?

3i+4j+12k

3i-4j+12k

--->> 3i+4j-12k

3i-4j-12k

3. Suppose that the coordinates of R be (3,4,12), what are the direction cosines of \((OR)\) Ã¢Æ'â€"?

--->> \(\frac{3}{13}, \frac{4}{13}, \frac{12}{13}\)

\(\frac{3}{14}, \frac{4}{14}, \frac{12}{14}\)

\(\frac{1}{13}, \frac{4}{13}, \frac{11}{13}\)

\(\frac{1}{14}, \frac{4}{14}, \frac{11}{14}\)

4. If \(\alpha=3i-j+2k,\) , \(\beta =2i+j-k\) and \(\gamma ÃŒâ€¦=i-2j+2k,\) find \((\alpha \times B)\times \gamma\).

24i-7j-5k

--->> 24i+7j-5k

-24i+7j-5k

24i+7j+5k

5. ____ is any quantity that has both a magnitude and a direction.

Scalar quantity

Vector and scalar quantity

None of the above

6. ____ vector with reference to a point X to origin O is the vector \(OX \)used to specify the true position of X with respect to O.

Negative

--->> Location

Position

Positive

7. Given\(\alpha=i+2j+3k,\beta =2i+j-k,\) find \(\alpha \times B\).

-5i-7j-3k

5i+7j-3k

--->> -5i+7j-3k

-5i+7j+3k

8. \(\alpha +\beta = \beta +\alpha\) is said to be ____ under addition of vectors.

--->> commutative

Abelian

distributive

associative

9. \(\bar{\alpha}\dot\bar{\beta}\) is a ____

--->> vector

scalar

coplanar vectors

collinear vectors

commutative

Abelian

distributive

--->> associative