

Vector Practice Questions

1. Define a vector and give two examples.
2. Find the magnitude of vector $a = (3, 4)$.
3. Add vectors $a = (2, 5)$ and $b = (4, -1)$.
4. Find the unit vector of $a = (6, 8)$.
5. Find dot product of $a = (1, 2, 3)$ and $b = (4, 5, 6)$.
6. If $|a| = 5$ and $|b| = 3$, angle between them is 60° , find $a \cdot b$.
7. Subtract $b = (7, 3)$ from $a = (10, -2)$.
8. Find the vector between points $A(2, 3)$ and $B(7, 9)$.
9. Check if vectors $(2, 4, 6)$ and $(1, 2, 3)$ are parallel.
10. Find cross product of $a = (1, 0, 0)$ and $b = (0, 1, 0)$.