

## DISPLACEMENT VECTORS – ANSWERS

Given points  $P$  and  $Q$ , find the displacement vector  $\overrightarrow{PQ}$ .

1.  $P = (1, 0, 3)$  and  $Q = (0, 2, 4)$

$$\overrightarrow{PQ} = -\hat{i} + 2\hat{j} + \hat{k}$$

2.  $P = (2, 3, 4)$  and  $Q = (5, 3, 8)$

$$\overrightarrow{PQ} = 3\hat{i} + 4\hat{k}$$

3.  $P = (-4, 3, -8)$  and  $Q = (1, 2, 3)$

$$\overrightarrow{PQ} = 5\hat{i} - \hat{j} + 11\hat{k}$$

4.  $P = (-2, -3, 4)$  and  $Q = (5, 3, 8)$

$$\overrightarrow{PQ} = 7\hat{i} + 6\hat{j} + 4\hat{k}$$

5.  $P = (2, 3, 0)$  and  $Q = (2, 3, 5)$

$$\overrightarrow{PQ} = 5\hat{k}$$