

Match-Up

3D Vectors

1	The position vector of the point with coordinates $(3, -1, 4)$	A	$i + \sqrt{3}j - k$
2	The vector joining the points $(2, 0, 4)$ and $(5, 1, 8)$	B	$3i - 2j + 4k$
3	The unit vector in the direction of $i + 2j - 2k$	C	$-3i - j + 4k$
4	The vector $a - 3b$ where $a = i - \sqrt{3}j - 5k$ and $b = -i - 2k$	D	$\frac{1}{3}i + \frac{2}{3}j + \frac{2}{3}k$
5	The position vector of the midpoint of $(-2, 1, 1)$ and $(-4, -3, 7)$	E	$\sqrt{3}i - j$
6	A vector which is parallel to $-2i - 4j - 4k$	F	$3i - j + 4k$
7	A vector with a magnitude of 5	G	$\frac{1}{3}i + \frac{2}{3}j + \frac{1}{3}k$
8	A vector which is parallel to the vector joining $(2, -3, 6)$ and $(3.5, -4, 8)$	H	$4i - \sqrt{3}j + k$
9	A vector which makes an angle of 30° with the x -axis	I	$3i + 4k$
10	A vector with a magnitude of $\sqrt{5}$	J	$3i + j + 4k$
11	The position vector of the point which splits the line segment that joins $(0, 1, 0)$ and $(1, 0, 1)$ in the ratio $1 : 2$	K	$2\sqrt{3}i + 2j + 4k$
12	A vector with a magnitude which is twice that of the vector $-2j + 2k$	L	$\frac{1}{3}i + \frac{2}{3}j - \frac{2}{3}k$

1	2	3	4	5	6	7	8	9	10	11	12
F	J	L	H	C	D	I	B	E	A	G	K