

QUESTION

If $\mathbf{c} = \mathbf{i} - \mathbf{j} + 2\mathbf{k}$ and $\mathbf{d} = \mathbf{j} - \mathbf{k}$ find $\mathbf{c} \times \mathbf{d}$.

ANSWER

$$\begin{aligned}\mathbf{c} \times \mathbf{d} &= (1, -1, 2) \times (0, 1, -1) = (-1(-1) - 2(1), 2(0) - 1(-1), 1(1) - (-1)0) \\ &= (1 - 2, 0 + 1, 1 - 0) = (-1, 1, 1)\end{aligned}$$