

QUESTION

Calculate a unit vector which is parallel to  $2\mathbf{i} - 3\mathbf{j} + 6\mathbf{k}$ .

ANSWER

$$\text{Unit vector} = \pm \frac{2\mathbf{i} - 3\mathbf{j} + 6\mathbf{k}}{\sqrt{2^2 + (-3)^2 + 6^2}} = \pm \frac{1}{7}(2\mathbf{i} - 3\mathbf{j} + 6\mathbf{k})$$