Answer on question #52042, Physics, Quantum Mechanics

Question Given three vectors $\vec{a} = -i - 4j + 2k$,$\vec{b} = 3i + 2j - 2k$, $\vec{c} = 2i - 3j + k$, calculate $\vec{a} \cdot (b \times c)$
-6
6
9
-9

Solution To find triple product we have to find determinant of matrix made of coordinates of the vectors,

$$\vec{a} \cdot (b \times c) = \begin{vmatrix} -1 & -4 & 2 \\ 3 & 2 & -2 \\ 2 & -3 & 1 \end{vmatrix} = 6$$

Answer is 6.