Please PRINT your name _____

No calculators, cell phones, computers, notes, etc.

Circle your answer. Make your work correct, complete and coherent.

The quiz is worth 5 points. The solutions will be posted on my website later today.

Quiz 2, January 25, 2021

Find the vector of length 7 that has the same direction as $\vec{v} = 12\vec{i} - 5\vec{k}$.

ANSWER: The vector $\frac{\vec{v}}{|\vec{v}|} = \frac{12\vec{i}-5\vec{k}}{\sqrt{12^2+5^2}}$ has length 1 and the same direction as \vec{v} . The vector $7\frac{\vec{v}}{|\vec{v}|} = \begin{bmatrix} 7\\ \sqrt{12^2+5^2} (12\vec{i}-5\vec{k}) \end{bmatrix}$ has length 7 and the same direction as \vec{v} . Of course $\sqrt{12^2+5^2}$ can also be written as 13.