Quizzes

NAME:_____

PERM:_____

Show your work. Partial points might be awarded. No calculators. You DO need to simplify your answers.

Assume that $\overrightarrow{u} = \langle 7, -1, -2 \rangle$, $\overrightarrow{v} = \langle -4, 3, 2 \rangle$ and $\overrightarrow{w} = \langle -3, -1, 1 \rangle$.

(1) Find the length of $2\overrightarrow{v} - 3\overrightarrow{w}$.

(2) Is $\overrightarrow{u} + 2\overrightarrow{v}$ perpendicular to $\overrightarrow{w}$? State your reason.