$$\begin{pmatrix} 1 & 10 & 6 \\ 1 & 6 & 5 \\ 1 & 2 & 4 \end{pmatrix} \cdot \begin{pmatrix} 1/4 \\ 3/8 \\ 3/8 \end{pmatrix} = \begin{pmatrix} 1\frac{1}{4} + 10\frac{3}{8} + 6\frac{3}{8} \\ 1\frac{1}{4} + 6\frac{3}{8} + 5\frac{3}{8} \\ 1\frac{1}{4} + 2\frac{3}{8} + 4\frac{3}{8} \end{pmatrix}$$