## 수시퀴즈 1차

1. Evaluate the determinant of the matrix A.

$$A = \begin{bmatrix} 1 & 2 & -4 \\ 3 & 5 & 1 \\ -2 & 0 & 1 \end{bmatrix}$$

2. Find a 2-dimensional unit vector  $\overrightarrow{v}$  such that  $\overrightarrow{v}$  is orthogonal to the vector <1,1>, and  $\overrightarrow{v}\cdot\overrightarrow{w}>0$  when  $\overrightarrow{w}=<-2,1>$ .