Quiz 6

Multiple Choice

1 (25 pts) Using Cramer's Rule to do the fellowing problem. Let

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

. Given that $\det(A) = -10$, compute the (3,2) entry of A^{-1}

(a) $-\frac{1}{5}$

(b) $\frac{1}{5}$

(c) -5

(d) $-\frac{1}{2}$

(e) $\frac{1}{2}$

2 (25 pts)
Let $A = \begin{bmatrix} 4 & 0 & 1 \\ 1 & 2 & 3 \\ 0 & 2 & 1 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 1 & 0 \\ 3 & -5 & 2 \\ 0 & 0 & 2 \end{bmatrix}$
Compute the determinant of

$$-2AB^{-1}$$

without computing the matrix AB^{-1}

(a) 7

(b) 14

(c) 21

(d) 28

(e) 56