

Instructor: Prof. A. Suci

Name: \_\_\_\_\_

**MTH 1101 — QUIZ 3 — FALL 1996**

**Instructions:** Put your name in the blanks above. Put your final answers to each question in the designated spaces on these test pages. Show your work—if there is not enough room, use the back of the page.

---

1. Let  $A = \begin{bmatrix} 2 & 3 \\ 1 & 0 \end{bmatrix}$ ,  $B = \begin{bmatrix} 1 & 0 & 2 \\ 0 & 3 & -4 \end{bmatrix}$ ,  $C = [2 \quad -1]$ .

Decide whether the following products are defined or not. If they are, compute them. If they are not, say so.

$$A \cdot B, \quad B \cdot A, \quad A \cdot C, \quad C \cdot A, \quad B \cdot C, \quad C \cdot B.$$

**2)** Let:  $A = \begin{bmatrix} 5 & 6 \\ -1 & 3 \\ 4 & -2 \end{bmatrix}$ ,  $B = \begin{bmatrix} -2 & 0 \\ 4 & 5 \\ 7 & 1 \end{bmatrix}$ . Compute:  $2 \cdot A - 3 \cdot B$ .

**3)** Find the inverse of the matrix  $A = \begin{bmatrix} 5 & 3 \\ 6 & 4 \end{bmatrix}$ .