Please show all your work! Answers without supporting work will not be given credit. Write answers in spaces provided. You have 15 minus to complete this exam.

Name

1. (8 pts) Find the inverse of the following matrix:

$$A = \left[ \begin{array}{cc} 3 & 2 \\ 8 & 5 \end{array} \right]$$

2. (8 pts) Find a basis for the column space and null space of the following matrix:

$$A = \left[ \begin{array}{cccc} 4 & 5 & 9 & -2 \\ 6 & 5 & 1 & 12 \\ 3 & 4 & 8 & -3 \end{array} \right]$$