

Name: _____

MATH230 Discussion Quiz 5

20 minutes, 10 points total, closed note, no calculators

1: Parametrize all solutions for the system $\{w+x+y+z = 16, -2w+y+z = 8\}$. Then given the additional equation $w+x = 2$, eliminate one of the parameters and reparametrize. **(4 points)**

2: Find matrices A, B such AB, BA are defined and $AB = 0 \neq BA$, or show why this task is impossible. **(3 points)**

3: Mark the following true or false **(1 point each)**

(a): If XY and YX are defined for matrices X and Y , then XY and YX are square.

(b): If ABA is invertible, then A and B are both invertible

(c): Suppose B is invertible and A, B are known matrices. For the matrix equation $AX = AB$, the only solution for X is $X = B$.