Name:\_\_\_\_\_ Recitation Section:\_\_\_\_\_

Math 1553 Quiz 1, Fall 2018: Section 2.1 (10 points, 10 minutes)

- **1.** (1 point) Consider the equation x + 2y z = 1 for (x, y, z) in  $\mathbb{R}^3$ . Does this describe a line or a plane in  $\mathbb{R}^3$ ? (circle one answer) LINE PLANE
- **2.** (1 point) Is the equation cos(2)x 4y z = 17 a linear equation in *x*, *y*, and *z*? Circle your answer: LINEAR NOT LINEAR
- **3.** (4 points) Write a system of two linear equations in the variables *x* and *y* that has infinitely many solutions.

**4.** (4 points) Write a consistent system of three linear equations in the variables *x* and *y*.