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

1. (1 point) Consider the equation $x+2 y-z=1$ for $(x, y, z)$ in $\mathbf{R}^{3}$. Does this describe a line or a plane in $\mathbf{R}^{3}$ ? (circle one answer) LINE PLANE
2. (1 point) Is the equation $\cos (2) x-4 y-z=17$ 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 $y$.
