## Quiz 1 Calculus 3 10/30/19

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. A really scary ghost flies along a line segment from (3, -4, 6) to (1, -3, 8). Give equations x(t), y(t), z(t), and bounds for t to parametrize this path.

2. A wicked little goblin is running in circles around you gibbering curses. You're at the origin and the goblin's path is a circle with radius 4 feet, which is really frustrating because it puts him just out of reach. Also, you're having a nightmare. Give parametric equations x(t), y(t), and bounds for *t* that produce 13 times around the goblin's path..