## Quiz $1 \quad$ Calculus $3 \quad 10 / 23 / 20$

Each problem is worth 5 points. Clear and complete justification is required for full credit. Print and complete the quiz without any assistance from resources beyond calculator and paper.
Submit a pdf scan of your completed quiz on Moodle.

1. Give parametric equations $\mathrm{x}(t), \mathrm{y}(t), \mathrm{z}(t)$ and bounds for $t$ that produce a path from $(1,5,1)$ to $(5,3,2)$.
2. Give parametric equations $\mathrm{x}(t), \mathrm{y}(t), \mathrm{z}(t)$ and bounds for $t$ that produce a circle with radius 3 centered at the origin in the plane $z=0$ beginning at $(3,0,0)$.
