Quiz 2 Calc 3 10/18/17

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

1. Set up an iterated integral for the volume of the region bounded above the cone $z = \sqrt{x^2 + y^2}$ and below the top half of the sphere with radius 1 centered at the origin.

2. Set up an iterated integral for the volume of the solid enclosed between $z = 112 + x^2 + y^2$ and $z = 130 - x^2 - y^2$.