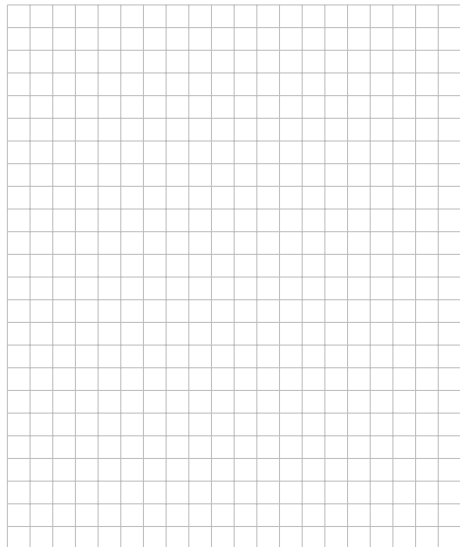


NAME(S):
MATH 258

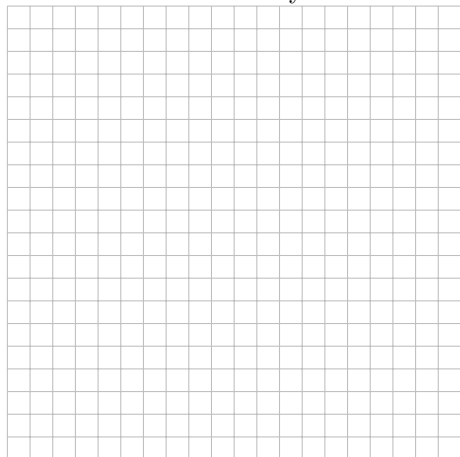
AREAS

OCTOBER 16, 2015

1. Find the entire area enclosed between the curves $y = x^3 + 1$ and $y = x^2 + 2x + 1$.



2. Find the area enclosed by the curves $4x + y^2 = 12$ and $x = y$.



Challenge. A water tank has the shape of a cylinder with a diameter of 10ft. The tank is oriented so that vertical cross-sections are circles. If the depth of the water in the tank is 7ft, what percent of the tank is being used?