1.(1 pt) An aquarium 7 m long, 5 m wide, and 2 m deep is full of water. Find the following:
the hydrostatic pressure on the bottom of the aquarium _____ ,
the hydrostatic force on the bottom of the aquarium _____ ,
the hydrostatic force on one end of the aquarium _____ .

2.(1 pt) The Deligne Dam on the Cayley River is built so that the wall facing the water is shaped like the region above the curve $y = 0.3x^2$ and below the line $y = 200$. (Here, distances are measured in meters.) The water level is 20 meters below the top of the dam. Find the force (in Newtons) exerted on the dam by water pressure. (Water has a density of $1000kg/m^3$, and the acceleration of gravity is $9.8m/sec^2$.)