9. [9 points] The tank pictured below has height 2 meters, and the top and bottom are equilateral triangles with sides of length 1 meter. It is filled **halfway** with hot chocolate. The hot chocolate has uniform density 1325 kg/m^3. The acceleration due to gravity is 9.8 m/s^2. Calculate the work needed to pump all the chocolate to the top of the tank. Show all your work. Give an **exact** answer. Include **units**.

2 m

1 m