Answer:

1. P1 = (1/6)hr \* 5m^3/hr \* 10^(-2)g/m^3 \*0.1 \* 10/g = (5/6)\*10^(-2) = 8.33\*10^(-3)
2. P2 = P1 \* 1500 \* 3\*10^(-4) = 3.75\*10^(-3)