Physics

1. $D = 600\ kg/m^{-3}$

$g/cm^{-3} = \frac{600}{1000} = 0.60\ g/cm^3$

2) a) $M = 150g$

$V = 200cm^3$

$D = \frac{150}{200}$

$D = 0.75\ g/cm^3$

b) 0.75×1000

$= 750\ kg/m^3$

3. $M = 72g$

$V_1 = 24ml$

$V_2 = 42ml$

$V = V_2 - V_1$

$42 - 24$

$= 18cm^3$

$D = \frac{72}{18} = 4\ g/cm^3$

Q4. As temperature increases, volume of most of the liquids also increases and when the volume increases density decreases.

Q5. When bottle is filled and stopper is inserted, the excess liquid rises through the hole and drain out.