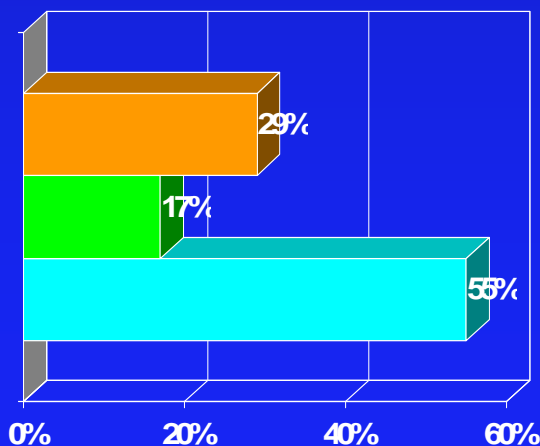
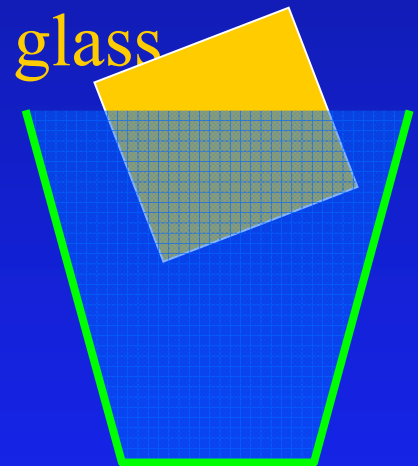


Preflight 1

Suppose you float a large ice-cube in a glass of water, and that after you place the ice in the glass the level of the water is at the very brim. When the ice melts, the level of the water in the glass will:

1. Go up, causing the water to spill out of the glass
2. Go down.
3. Stay the same. ← CORRECT



$$F_B = \rho_W V_{\text{displaced}} g$$

$$W = \rho_{\text{ice}} V_{\text{ice}} g \rightarrow \rho_W V_{\text{melted_ice}} g$$