

$$F_{\text{浮力}} = G_{\text{排开的液体或气体的重力}}$$



$$G_{\text{排}} = \text{水的质量} m \cdot g$$



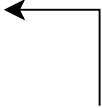
$$m_{\text{水}} = \rho_{\text{水的密度}} \cdot V_{\text{排出的水的体积}}$$



$$V_{\text{水排}} = V_{\text{铁球}}$$



$$V_{\text{铁}} = \frac{m_{\text{铁}}}{\rho_{\text{铁}}}$$



$$m_{\text{铁}} = \frac{G_{\text{铁}}}{g}$$