

COMMENT ISOLER UNE GRANDEUR

Rappels
1ère spé

$$1) \quad m_{\text{solution}} = m_{\text{solute}} + m_{\text{solvant}}$$
$$m_{\text{solvant}} = m_{\text{solution}} - m_{\text{solute}}$$

$$2) \quad \pi = \frac{m}{n} \quad n = \frac{m}{M}$$

↳ explication
mathématique

$$n \times \pi = \frac{m}{n} \times n$$

$$\frac{n \times \pi}{n} = \frac{m}{M} \Rightarrow n = \frac{m}{M}$$

$$3) \quad m = \frac{\rho \times V}{M} \quad \text{soit} \quad V = \frac{m \times M}{\rho}$$

$$4) \quad y = ax + b$$

$$ax + b = y$$

$$ax = y - b$$

$$x = \frac{y - b}{a}$$

$$5) \quad F_e = k \times \frac{q_A q_B}{d^2}$$

$$d^2 = k \times \frac{q_A q_B}{F_e}$$

$$d = \sqrt{k \times \frac{q_A q_B}{F_e}}$$

$$6) \quad \frac{1}{x'} - \frac{1}{x} = \frac{1}{f'}$$

$$- \frac{1}{x} = \frac{1}{f'} - \frac{1}{x'} \quad \text{soit} \quad \frac{1}{x} = - \frac{1}{f'} + \frac{1}{x'}$$

$$\text{d'où} \quad \frac{1}{x} = \frac{1}{x'} - \frac{1}{f'}$$

$$x = \frac{1}{\frac{1}{x'} - \frac{1}{f'}}$$

$$7) \quad P = \frac{S - C}{S} \quad \text{soit} \quad S - C = P \times S$$

$$-C = P \times S - S$$

$$C = -P \times S + S$$

$$C = S - P \times S$$

$$8) \quad y = - \frac{1}{2} g t^2 + h$$

$$- \frac{1}{2} g t^2 + h = y$$

$$- \frac{1}{2} g t^2 = y - h$$

$$\frac{1}{2} g t^2 = -y + h$$

$$\frac{1}{2} g t^2 = h - y$$

$$t^2 = \frac{2 \times (h - y)}{g}$$

$$t = \sqrt{\frac{2 \times (h - y)}{g}}$$