

物理基礎

1. 長度的單位換算：

$$\text{km} \xrightarrow{+3} \text{m} \xrightarrow{+2} \text{cm} \xrightarrow{+1} \text{mm}$$

- (1) $4.2 \times 10^5 \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (2) $5.3 \times 10^2 \text{ m} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (3) $6.9 \times 10^9 \text{ cm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
- (4) $7.5 \times 10^4 \text{ mm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm}$
- (5) $2.9 \times 10^{-3} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (6) $6.7 \times 10^{-4} \text{ m} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (7) $2.1 \times 10^{-3} \text{ cm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
- (8) $3.8 \times 10^{-2} \text{ mm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

2. 面積的單位換算：

$$\text{km}^2 \xrightarrow{+6} \text{m}^2 \xrightarrow{+4} \text{cm}^2 \xrightarrow{+2} \text{mm}^2$$

- (1) $7.8 \times 10^4 \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (2) $6.4 \times 10^5 \text{ m}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (3) $7.2 \times 10^6 \text{ cm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (4) $6.3 \times 10^9 \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (5) $9 \times 10^{-2} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (6) $2 \times 10^{-6} \text{ m}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (7) $6 \times 10^{-2} \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (8) $3 \times 10^{-9} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (9) $2 \times 10^{-4} \text{ m}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (10) $7 \times 10^{-7} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$

3. 體積的單位換算

$$\text{km}^3 \xrightarrow{+9} \text{m}^3 \xrightarrow{+6} \text{cm}^3 \xrightarrow{+3} \text{mm}^3$$

- (1) $3.1 \times 10^4 \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (2) $5.4 \times 10^7 \text{ m}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (3) $3.7 \times 10^8 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (4) $2.9 \times 10^2 \text{ mm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ cm}^3$
- (5) $1.5 \times 10^{-1} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (6) $9.2 \times 10^{-8} \text{ m}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (7) $4.9 \times 10^{-7} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (8) $7.3 \times 10^{-3} \text{ mm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ cm}^3$
- (9) $7.6 \times 10^3 \text{ mm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ cm}^3$
- (10) $4.3 \times 10^{-1} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$

- (1) $3.8 \times 10^3 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (2) $1.3 \times 10^{-2} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (3) $4.9 \times 10^3 \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (4) $2.8 \times 10^{-5} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (5) $7.2 \times 10^2 \text{ m}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (6) $5.6 \times 10^{-3} \text{ mm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm}$
- (7) $3.0 \times 10^6 \text{ m}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (8) $2.5 \times 10^1 \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (9) $6.3 \times 10^{-4} \text{ cm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
- (10) $4.3 \times 10^7 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (11) $8.1 \times 10^{-4} \text{ m}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (12) $5.4 \times 10^{-1} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (13) $6.3 \times 10^8 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (14) $7.4 \times 10^{-3} \text{ cm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
- (15) $5.9 \times 10^{-5} \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (16) $6.0 \times 10^6 \text{ mm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm}$
- (17) $7.8 \times 10^5 \text{ m} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (18) $3.4 \times 10^{-2} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (19) $5.3 \times 10^{-6} \text{ m}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (20) $2 \times 10^3 \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (21) $4 \times 10^2 \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (22) $6 \times 10^{-4} \text{ cm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ mm}$
- (23) $3 \times 10^{-6} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (24) $7 \times 10^3 \text{ m} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
- (25) $5 \times 10^{-1} \text{ mm} = \underline{\hspace{2cm}} \text{ km} = \underline{\hspace{2cm}} \text{ m} = \underline{\hspace{2cm}} \text{ cm}$
- (26) $6 \times 10^4 \text{ cm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ mm}^2$
- (27) $8 \times 10^9 \text{ m}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ cm}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (28) $9 \times 10^{-3} \text{ mm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$
- (29) $3 \times 10^4 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ km}^3 = \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ mm}^3$
- (30) $4.3 \times 10^{-1} \text{ cm}^2 = \underline{\hspace{2cm}} \text{ km}^2 = \underline{\hspace{2cm}} \text{ m}^2 = \underline{\hspace{2cm}} \text{ mm}^2$