

1. Convert 8.05×10^6 dg to fg.

2. Convert 7.62 pm^2 to dm^2 .

3. Convert 0.664 mm^3 to Mm^3 .

4. Convert $1,764 \text{ kg/m}$ to g/cm .

5. Convert $1,800 \text{ L}$ to m^3 .

1. Convert 8.05×10^6 dg to fg.

$$(-1 - -15) \times 1 + 6 = 20$$

$$8.05 \times 10^{20} \text{ fg}$$

2. Convert 7.62 pm^2 to dm^2 .

$$(-12 - -1) \times 2 + 0 = -22$$

$$7.62 \times 10^{-22} \text{ dm}^2$$

3. Convert 0.664 mm^3 to Mm^3 .

$$(-3 - 6) \times 3 + -1 = -28$$

$$6.64 \times 10^{-28} \text{ Mm}^3$$

4. Convert $1,764 \text{ kg/m}$ to g/cm .

$$(3 - 0) \times 1 + 3 = 6$$

$$(0 - -2) \times 1 + 0 = 2 \text{ inverts to } -2$$

$$6 + -2 = 4$$

$$1.764 \times 10^4 \text{ g/cm}$$

5. Convert $1,800 \text{ L}$ to m^3 .

Recall that $1 \text{ mL} = 1 \text{ cm}^3$

Change the problem to be in terms of mL.

Convert $1,800,000 \text{ mL}$ to m^3

Replace mL with cm^3

Convert $1,800,000 \text{ cm}^3$ to m^3

Solve: $(-2 - 0) \times 3 + 6 = 0$

$$1.8 \times 10^0 \text{ m}^3$$