
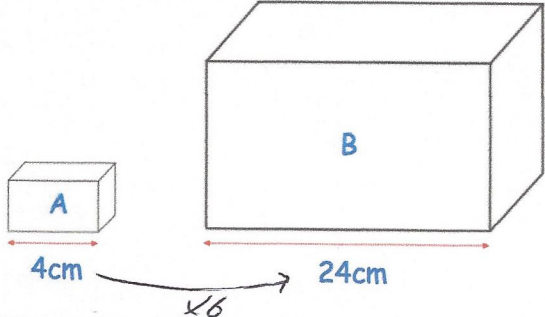


10th May	 Corbettmaths
Work out the value of 150^3 Give your answer in standard form. $150^3 = 3375000$	3.375×10^6
Solve the simultaneous equations $x - y = 13$ $\frac{2}{3}x + \frac{1}{2}y = -3 \quad \times 6$	$\begin{aligned} 4x + 3y &= -18 \\ x - y &= 13 \\ \hline 3x - 3y &= 39 \\ 4x + 3y &= -18 \quad \text{Add} \\ \hline 7x &= 21 \\ x &= 3 \quad y = -10 \end{aligned}$
Liquid A has a density of 0.65g/cm^3 Liquid B has a density of 1.4g/cm^3 200g of liquid A and 60g of liquid B are mixed for make liquid C. Work out the density of liquid C.	$\begin{aligned} \text{Volume of A: } & 200 \div 0.65 = 307.6923 \\ \text{Volume of B: } & 60 \div 1.4 = 42.8571 \\ \text{Volume of C: } & 350.5494 \text{ cm}^3 \\ \text{Density of C: } & \frac{260}{350.5494} = 0.7417 \text{ g/cm}^3 \end{aligned}$
	Shown are two mathematically similar cuboids. The volume of cuboid B is 1728cm^3 Find the volume of cuboid A. $1728 \div 6^3 = 8\text{cm}^3$
The probability of winning a game is 0.7. $P(\text{not winning}) = 0.3$ The game is played 3 times. What is the probability of exactly 2 wins.	$\begin{aligned} P(WWN) &= 0.7 \times 0.7 \times 0.3 = 0.147 \\ P(WNW) &= 0.147 \\ P(NWW) &= 0.147 \\ \hline & 0.441 \end{aligned}$