

calculate: $(2.34\text{kg} + 1.118\text{kg})$ divide by $(1.05\text{cm} \times 22.2\text{cm} \times 0.9\text{cm})$

$$(2.34\text{kg} + 1.118\text{kg}) / (1.05\text{cm} \times 22.2\text{cm} \times 0.9\text{cm}) = 3.458\text{kg} / (1.05 \times 22.2 \times 0.9\text{cm}^3) = 3.458\text{kg} / 20.979\text{cm}^3 = 0.164831498 = 0.2\text{kg cm}^{-3}$$

the dimensions of a piece of metal are: length: 55.5cm, breadth: 2.0cm, thickness: 0.02cm. calculate:

a) the area of the largest surface.

$$S = 55.5\text{cm} \times 2.0\text{cm} = 111\text{cm}^2$$

b) the volume.

$$V = 55.5\text{cm} \times 2.0\text{cm} \times 0.02\text{cm} = 2.22\text{cm}^3$$

c) the perimeter of the largest face.

$$P = 2 \times (55.5\text{cm} + 2.0\text{cm}) = 2 \times 57.5\text{cm} = 115\text{cm}$$