

SIGNIFICANT DIGITS (OR) SIGNIFICANT FIGURES -2

RULES:-

1) In multiplication or division, the final result should retain as many significant figures as are there in the original number with the least significant figures.

2) In addition or subtraction, the final result should retain as many decimal places as are there in the number with the least decimal places.

1) Density = $4.237\text{g} / 2.51\text{cm}^3 =$

1.688 1.68 1.69 1.685

2) $30.435\text{ g} + 1.02\text{ g} + 222.7\text{g} =$

254.155 g 254.16 g 254.15 g 254.2 g

3) $30.435\text{ g} - 1.02\text{ g} =$

29.415 g 29.41 g 29.410 g 29.42 g

4) $30.435\text{ kg/m}^3 \times 1.02\text{ m}^3 =$ kg

31.0437 31.043 31.04 31.0



1) $0.307\text{ m} - 0.304\text{ m} =$

0.003 m 3 mm $3 \times 10^3\text{ m}$

2) $436.32\text{ g} + 227.2\text{ g} + 0.301\text{ g} =$

663.821 g 663.8 g 664 g

3) $76.4 \times 180.4 =$

13800 13783 13,782.56

4) $934.9 \div 0.00455 =$

20500 205472 205472.5

Each side of a cube is measured to be 7.203 m.

What are the total surface area and the volume of the cube to appropriate significant figures?

Ans :

311.299254 m² and 373.714754 m³

311.3 m² and 373.7 m³

373.7 m³ and 311.3 m²