

Density and Pressure *fluency*



Find the density. m is the mass, V the volume.

1 $m = 240 \text{ g}, V = 30 \text{ cm}^3$

2 $m = 150 \text{ g}, V = 50 \text{ cm}^3$

3 $m = 96 \text{ g}, V = 16 \text{ cm}^3$

4 $m = 450 \text{ g}, V = 90 \text{ cm}^3$

5 $m = 38 \text{ g}, V = 4 \text{ cm}^3$

6 $m = 13.5 \text{ g}, V = 1.5 \text{ cm}^3$



Find the mass. D is the density, V the volume.

7 $D = 8 \text{ g/cm}^3, V = 20 \text{ cm}^3$

8 $D = 2.5 \text{ g/cm}^3, V = 40 \text{ cm}^3$

9 $D = 11 \text{ g/cm}^3, V = 6 \text{ cm}^3$

10 $D = 0.9 \text{ g/cm}^3, V = 50 \text{ cm}^3$

11 $D = 7.8 \text{ g/cm}^3, V = 15 \text{ cm}^3$

12 $D = 1.2 \text{ g/cm}^3, V = 2.5 \text{ cm}^3$



Find the volume. m is the mass, D the density.

13 $m = 120 \text{ g}, D = 6 \text{ g/cm}^3$

14 $m = 75 \text{ g}, D = 2.5 \text{ g/cm}^3$

15 $m = 54 \text{ g}, D = 9 \text{ g/cm}^3$

16 $m = 390 \text{ g}, D = 12 \text{ g/cm}^3$

17 $m = 17 \text{ g}, D = 0.5 \text{ g/cm}^3$

18 $m = 91 \text{ g}, D = 3.5 \text{ g/cm}^3$



Find the pressure. F is the force, A the area.

19 $F = 600 \text{ N}, A = 2 \text{ m}^2$

20 $F = 450 \text{ N}, A = 3 \text{ m}^2$

21 $F = 80 \text{ N}, A = 0.5 \text{ m}^2$

22 $F = 1200 \text{ N}, A = 5 \text{ m}^2$

23 $F = 90 \text{ N}, A = 6 \text{ m}^2$

24 $F = 250 \text{ N}, A = 0.25 \text{ m}^2$



Find the force. P is the pressure, A the area.

25 $P = 50 \text{ N/m}^2, A = 3 \text{ m}^2$

26 $P = 120 \text{ N/m}^2, A = 0.5 \text{ m}^2$

27 $P = 75 \text{ N/m}^2, A = 4 \text{ m}^2$

28 $P = 2.5 \text{ N/m}^2, A = 8 \text{ m}^2$

29 $P = 400 \text{ N/m}^2, A = 1.5 \text{ m}^2$

30 $P = 35 \text{ N/m}^2, A = 12 \text{ m}^2$