

1. A prism has a cross section in the shape of an equilateral triangle.

Given the length of one side of the triangle and the length of the prism respectively, calculate its volume. (all measurements in cm, answer to 2 d.p.)

(a) 7, 19

(b) 12, 37

(c) 21, 45

2. Calculate the volumes of spheres with the following diameters.

(all measurements in cm, answer to 2 d.p.)

(a) 5

(b) 13

(c) 56

3. Calculate the volume of a tetrahedron with the length of one side of the base and vertical height given. (all measurements in cm, answer to 2 d.p.)

(a) 7, 9

(b) 16, 25

(c) 69, 88

4. Calculate the volume of a pyramid with the length on one side of the base and vertical height given. (all measurements in cm, answer to 2 d.p.)

(a) 8, 12

(b) 17, 22

(c) 26, 51

5. Calculate the volume of a cone with the diameter of the base and vertical height given.

(all measurements in cm, answer to 2 d.p.)

(a) 13, 23

(b) 28, 39

(c) 45, 66

1.

(a) 403.14 cm^3

(b) 2307.09 cm^3

(c) 8593.14 cm^3

2.

(a) 523.60 cm^3

(b) 9202.77 cm^3

(c) 735618.58 cm^3

3.

(a) 63.65 cm^3

(b) 923.76 cm^3

(c) 60473.00 cm^3

4.

(a) 256.00 cm^3

(b) 2119.33 cm^3

(c) 11492.00 cm^3

5.

(a) 1017.61 cm^3

(b) 8004.78 cm^3

(c) 34989.49 cm^3