Volume of Cuboids and Prisms *Fluency* ANSWERS

Find the volume of the cuboid. The lengths are in centimetres.

1. 3 by 4 by 5 — 60 cm³
2. 2 by 6 by 10 — 120 cm³
3. 5 by 5 by 5 — 125 cm³
4. 7 by 3 by 2 — 42 cm³
5. 8 by 4 by 6 — 192 cm³
6. 10 by 10 by 3 — 300 cm³

Find the volume of the cuboid. The lengths are in centimetres.

7. 2.5 by 4 by 6 — 60 cm³
8. 1.5 by 2 by 8 — 24 cm³
9. 0.5 by 12 by 3 — 18 cm³
10. 3.2 by 5 by 2 — 32 cm³
11. 4.5 by 4.5 by 2 — 40.5 cm³
12. 1.2 by 1.5 by 10 — 18 cm³

Find the volume of the prism. A is the area of its cross section.

13. $A = 12$ cm², length 8 cm — 96 cm³
14. $A = 20$ cm², length 5 cm — 100 cm³
15. $A = 7.5$ cm², length 4 cm — 30 cm³
16. $A = 15$ cm², length 12 cm — 180 cm³
17. $A = 9$ cm², length 2.5 cm — 22.5 cm³
18. $A = 36$ cm², length 10 cm — 360 cm³

Find the volume of the triangular prism. The triangle has base b and perpendicular height h. Lengths are in cm.

19. $b = 6$, $h = 4$, length 10 — 120 cm³
20. $b = 5$, $h = 8$, length 7 — 140 cm³
21. $b = 3$, $h = 4$, length 12 — 72 cm³
22. $b = 9$, $h = 2$, length 15 — 135 cm³
23. $b = 7$, $h = 6$, length 5 — 105 cm³
24. $b = 4.5$, $h = 4$, length 9 — 81 cm³

Find the missing length of the cuboid. Lengths are in cm, volumes in cm³.

25. $5 \times 4 \times ? = 120$ — 6 cm
26. $3 \times 6 \times ? = 90$ — 5 cm
27. $10 \times 4 \times ? = 200$ — 5 cm
28. $7 \times 4 \times ? = 84$ — 3 cm
29. $2.5 \times 6 \times ? = 150$ — 10 cm
30. $4 \times 1.5 \times ? = 36$ — 6 cm