

Area and Volume Scale Factors *fluency*



The length scale factor is given. Find the area scale factor.

1 3

2 5

3 1.5

4 $\frac{1}{2}$

5 $\frac{2}{3}$

6 10



The length scale factor is given. Find the volume scale factor.

7 2

8 4

9 1.5

10 $\frac{1}{3}$

11 $\frac{5}{2}$

12 0.1



Two similar shapes. Find the area of the larger shape.

13 lengths 4 and 10 cm, area 12 cm²

14 lengths 3 and 6 cm, area 20 cm²

15 lengths 5 and 15 cm, area 8 cm²

16 lengths 2 and 7 cm, area 12 cm²

17 lengths 6 and 9 cm, area 20 cm²

18 lengths 10 and 25 cm, area 40 cm²



Two similar solids. Find the length on the larger solid.

19 volumes 16 and 54 cm³, length 6 cm

20 volumes 8 and 125 cm³, length 4 cm

21 volumes 5 and 40 cm³, length 3 cm

22 volumes 27 and 64 cm³, length 9 cm

23 volumes 1 and 343 cm³, length 2 cm

24 volumes 24 and 81 cm³, length 10 cm



Two similar solids. Find the volume of the larger solid.

25 areas 20 and 45 cm², volume 40 cm³

26 areas 9 and 36 cm², volume 15 cm³

27 areas 16 and 100 cm², volume 24 cm³

28 areas 12 and 27 cm², volume 32 cm³

29 areas 50 and 72 cm², volume 125 cm³

30 areas 4 and 49 cm², volume 16 cm³