

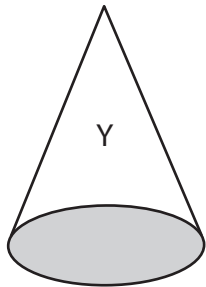
Name : \_\_\_\_\_

L152

## Scale Factors - Volumes

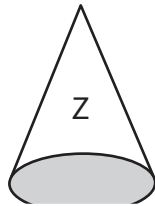
Each pair of figures is similar. Find the missing volume. (V denotes Volume)

1) Scale factor of Y to Z is 9 : 6.5

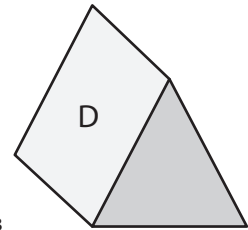
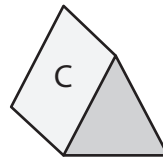


V = ?

Volume of figure Y



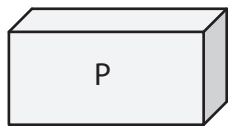
2) Scale factor of C to D is 1.7 : 4



V = ?

Volume of figure D = \_\_\_\_\_

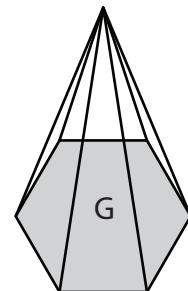
3) Scale factor of Q to



V = ?

Volume of figure P

Scale factor of G to H is 6 : 5



V = 216 in<sup>3</sup>

Volume of figure H = \_\_\_\_\_

5) Two similar octagons are shown. The volume of the smaller octagon is 512 cubic yards, 1

\_\_\_\_\_

6) Find the volume of cube U, if the volume of cube T is 36.501 cubic feet and the scale factor of T to U is 2.3 : 3.4.

\_\_\_\_\_

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Name : \_\_\_\_\_

## Answer key

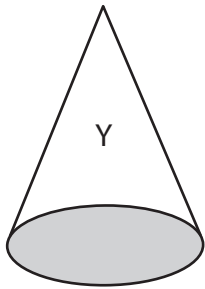
### Scale Factors - Volumes

L152

Each pair of figures is similar. Find the missing volume. (V denotes Volume)

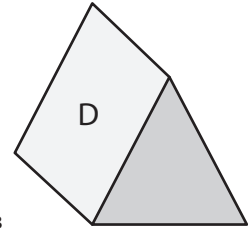
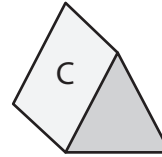
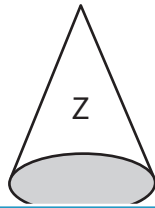
1) Scale factor of Y to Z is 9 : 6.5

2) Scale factor of C to D is 1.7 : 4



V = ?

Volume of figure Y

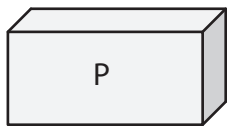


V = ?

Volume of figure D = 640 yd<sup>3</sup>

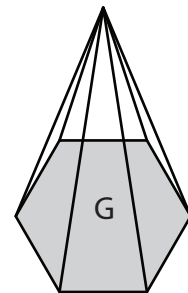
3) Scale factor of Q to P is 3 : 2

Scale factor of G to H is 6 : 5



V = ?

Volume of figure P



V = 216 in<sup>3</sup>

Volume of figure H = 125 in<sup>3</sup>

5) Two similar octagons are shown. The volume of the smaller octagon is 512 cubic yards, the volume of the larger octagon is \_\_\_\_\_

1 cubic yards

6) Find the volume of cube U, if the volume of cube T is 36.501 cubic feet and the scale factor of T to U is 2.3 : 3.4.

117.912 cubic feet

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