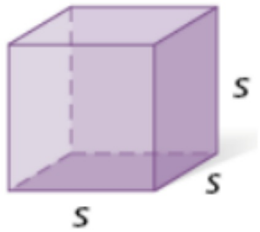
A cube has side length 1cm

Find the area of one of the faces of the cube.

Find the volume of the cube.




A cube has side length 2cm

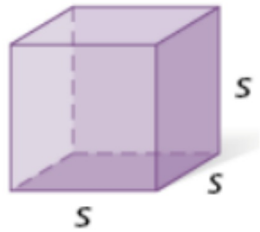
Find the area of one of the faces of the cube.

Find the volume of the cube.

A cube has side length 3cm

Find the area of one of the faces of the cube.

Find the volume of the cube.




A cube has side length 5cm

Find the area of one of the faces of the cube.

Find the volume of the cube.

If you multiply the side lengths of a solid by 2, it will...

Multiply the area of a face of the solid by 4

Multiply the volume of the solid by 8

Fill in the chart

| Length of edges | 1 | 2 | 4 |
|---|---|---|---|
| Area of faces | | | |
| Volume | | | |

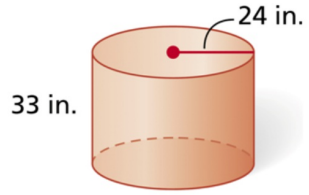
When comparing two figures...

If the ratio between the lengths is $a : b$

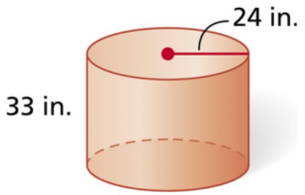
Then the ratio between the areas is $a^2 : b^2$

And the ratio between the volumes is $a^3 : b^3$

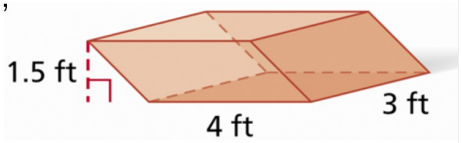
If the radius and height are doubled, describe the effect on the volume



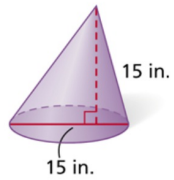
If the radius and height are multiplied by 2/3, describe the effect on the volume



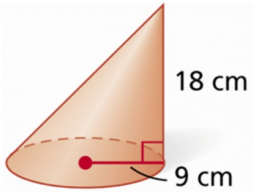

If all the lengths are mulitipled by 5, describe the effect on the volume




The diameter and height of the cone are divided by 3. Describe the effect on the volume.

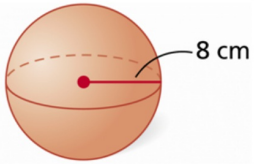



The radius and height of the cone are quadrupled. Describe the effect on the volume.

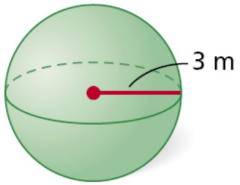



A cone has radius 2 in. and height 7 in. If the radius and height are multiplied by 4, describe the effect on the volume.

The radius of the sphere is multiplied by 3/4. Describe the effect on the volume.



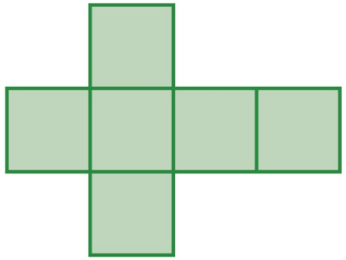

The radius of the sphere is multiplied by 3. Describe the effect on the surface area.



Surface Area

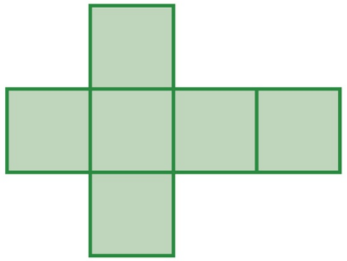
The sum of all the shapes that cover the surface of a solid

The area net to the right will make which solid? Cube

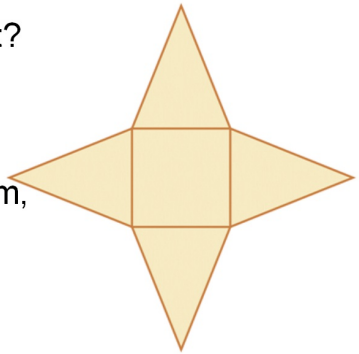


If the length of each edge is 3 cm, what is the surface area?

If the length of each edge is 12 cm, what is the surface area?

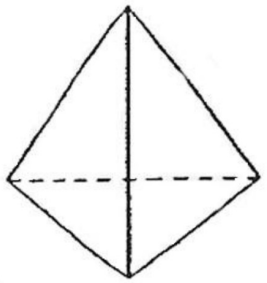


What solid can be made with this net?



If the edges of the square are 4 cm and the height of each triangle is 6 cm, what is the surface area?

What is the area net for the solid? Assume all triangles are equilateral.



If the length of one edge is 6, find the surface area of the triangular pyramid.