

Geometry

Notes

Sum of angles in a polygon

Prism volume formula

Pyramid volume formula

Sphere volume formula

Sphere surface area formula

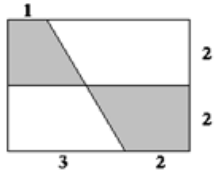
Cylinder volume formula

Cylinder surface area formula

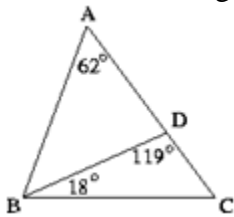
Similar triangles

Discussion Questions

1. What is the area of the shaded region?

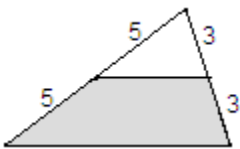


2. What is the angle ABD, in degrees?

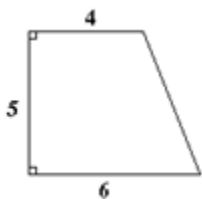


3. The area of a rectangle whose sides have integer length is 24 m^2 and its perimeter is 22 m. What is the length of the small side of this rectangle?

4. What proportion of the larger triangle is shaded?

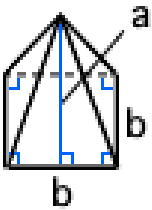


5. Find the ratio of the perimeter to the area of the figure.



6. Find the volume and the surface area of the below right pyramid.

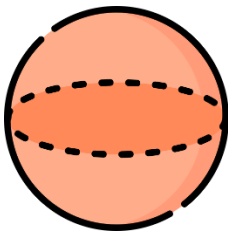
$a = 5$ in, $b = 4$ in, c (the height of the pyramid) = 4 in



Practice Questions

1. A triangle has the same area and base as a rectangle. If the rectangle height is 6 cm, then what is the triangle height?

2. Perry the platypus walked around a huge spherical-shaped ball along the dotted line; he walked 36π meters. What is the volume of this ball?



3. In rectangle ABCD, P bisects AB and M, N trisect CD. Find the ratio of shaded region to the area of ABCD.

