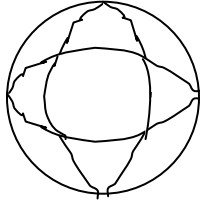
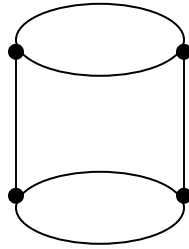


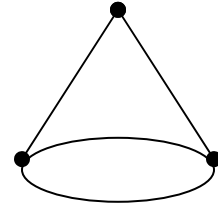
Measures Surface Area & Volume Page 1 A
Surface Area & Volume of the Six Basic 3D Images of Plane Euclidean Geometry.
 All answers for Surface Area & Volume must have the correct labels.



R = 3in

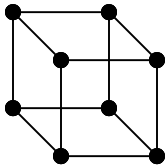


R = 2ft H = 7ft

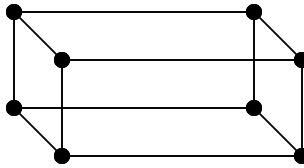


R=3yd S = 5yd H = 4yd

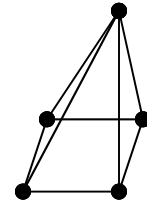
| | | |
|--|---|--|
| <p><u>Sphere:</u> $TSA = 4\pi \times (\text{radius})^2$</p> <p>Total Surface Area = 36π sq in</p> <p>-----</p> <p><u>Sphere:</u> $V = (4/3)\pi \times (\text{radius})^3$</p> <p>Volume = 36π cu in</p> | <p><u>Cylinder:</u> $TSA = 2\pi \times (\text{radius})^2 + C \times H$</p> <p>Total Surface Area = 36π sq ft</p> <p>-----</p> <p><u>Cylinder:</u> $V = \text{base area} \times \text{height}$</p> <p>Volume = 28π cu ft</p> | <p><u>Cone:</u> $TSA = \pi(\text{radius})^2 + \frac{1}{2} C \times S$</p> <p>Total Surface Area = 24π yd</p> <p>-----</p> <p><u>Cone:</u> $V = (1/3) \times \text{base area} \times \text{height}$</p> <p>Volume = 12π cu yd</p> |
|--|---|--|



S = 2 yd



L = 2in W = 6in H = 3in



B = 3ft S = 6ft H = 5ft

| | | |
|--|--|---|
| <p><u>Cube:</u> $TSA = 6 (\text{side length})^2$</p> <p>TSA = $6(S^2) = 24$ sq yd</p> <p>-----</p> <p><u>Cube:</u> $V = (\text{side length})^3$</p> <p>Volume = 8 cu yd</p> | <p><u>Prism:</u> $TSA = (F \times B)^2 + (T \times B)^2 + (R \times L)^2$</p> <p>TSA = $2HW + 2LW + 2HL = 72$ sq in</p> <p>-----</p> <p><u>Prism:</u> $V = \text{base area} \times \text{height}$</p> <p>Volume = $L \times W \times H = 36$ cu in</p> | <p><u>Pyramid:</u> $TSA = \text{base area} + 4(\text{TriangleAreas})$</p> <p>TSA = $B^2 + 4(1/2 \times B \times S) = 45$ sq ft</p> <p>-----</p> <p><u>Pyramid:</u> $V = (1/3) \times \text{base area} \times \text{height}$</p> <p>Volume = $1/3 B^2 \times H = 15$ cu ft</p> |
|--|--|---|