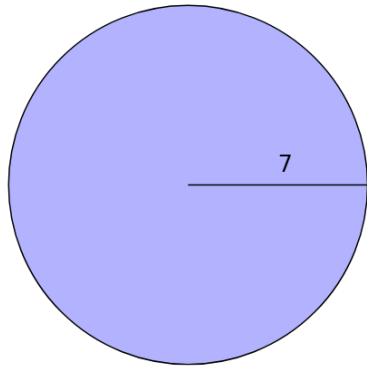


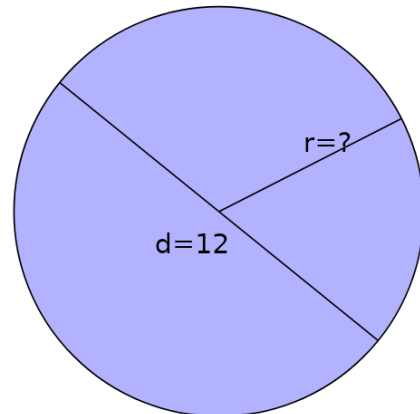
Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

- 1 What is the area of the circle as a function of π



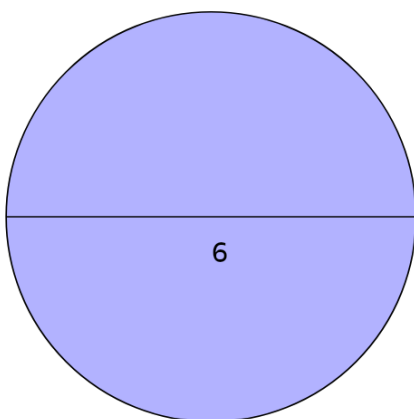
A	77π	B	85π
C	25π	D	73π
E	49π	F	61π

- 2 Find the radius of the circle that has the given diameter



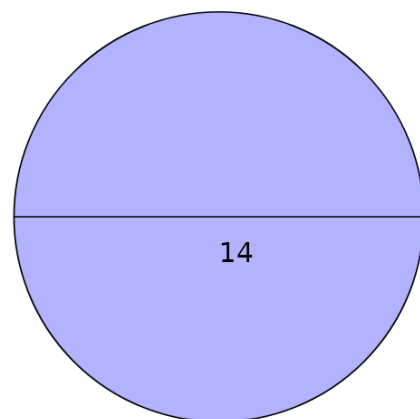
A	4	B	7	C	8
D	5	E	6		

- 3 Find the area without using a calculator. Remember that π is just a bit more than 3.

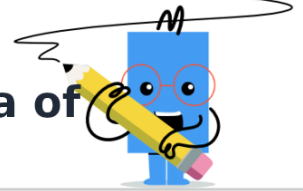


A	50.27	B	62.83	C	109.96
D	113.1	E	28.27	F	18

- 4 Find the area without using a calculator. Remember that π is just a bit more than 3.

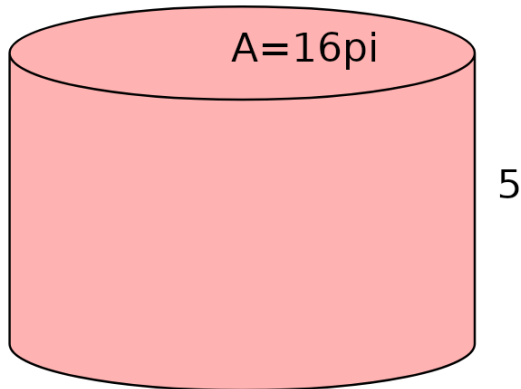


A	49	B	311.02	C	43.98
D	153.94	E	21.99	F	251.33



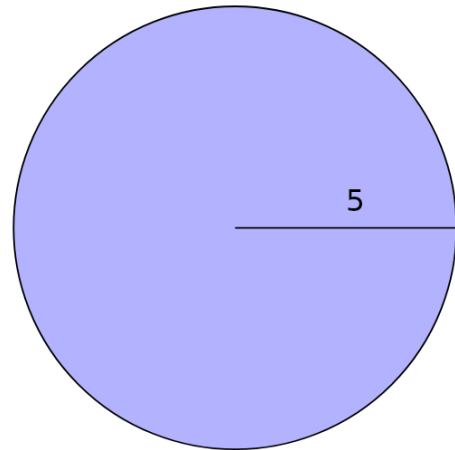
Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

5 What is the volume of this Cylinder?



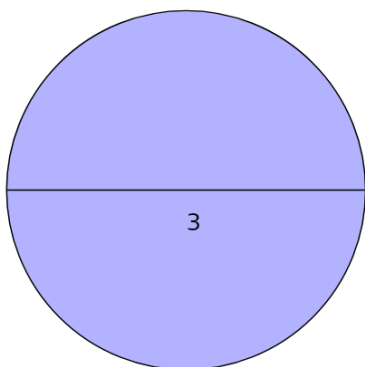
A	48π	B	72π
C	80π	D	96π
E	128π	F	56π

6 Find the area



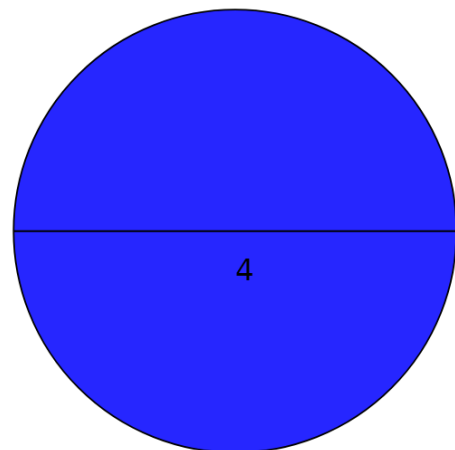
A	197.92	B	150.8	C	131.95
D	31.42	E	78.54	F	25

7 Find the circumference of the circle as a function of π

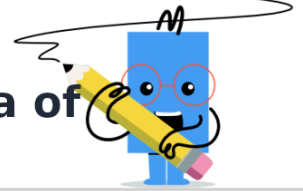


A	2π	B	3π
C	7π	D	8π
E	5π	F	10π

8 Find the circumference of the circle

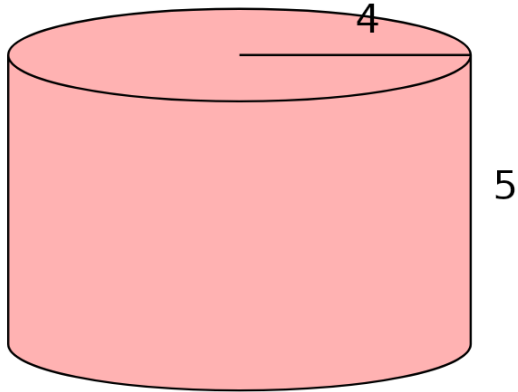


A	8	B	18.85	C	12.57
D	4	E	25.13	F	6.28



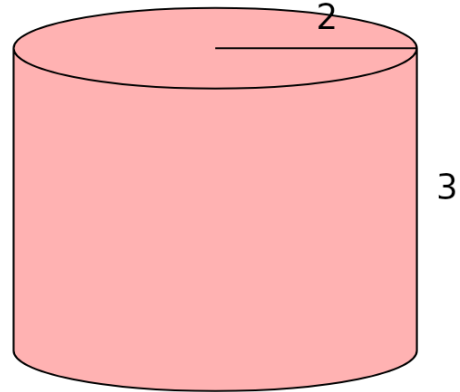
Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

9 What is the volume of this Cylinder?



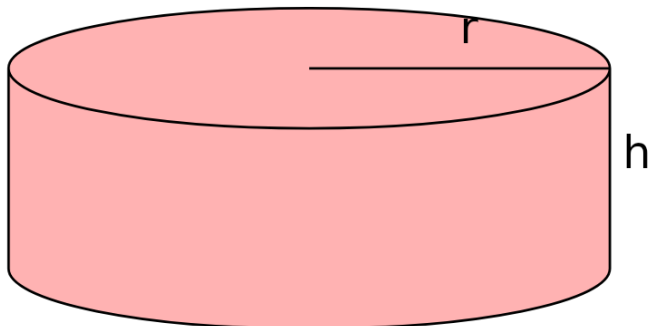
A	80π	B	48π
C	96π	D	144π
E	64π	F	72π

10 What is the surface area of this Cylinder?

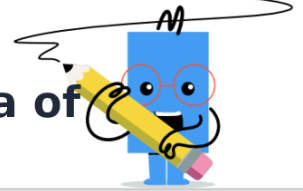


A	36π	B	4π
C	10π	D	20π
E	12π	F	26π

11 What is the formula for the volume of this Cylinder?



A	$V = \pi r^2 h$
B	$V = \frac{4}{3} \pi r^3$

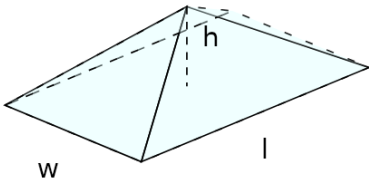


Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

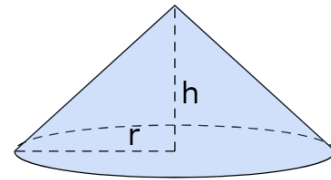
12 Which shape would this formula calculate the volume for?

$$V = \frac{1}{3}h\pi r^2$$

A



B



13 What shape would this formula calculate the volume for?

$$V = \frac{1}{3}h\pi r^2$$

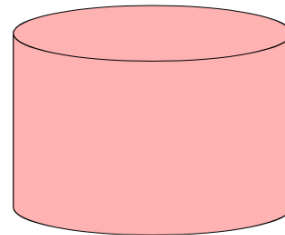
A

Sphere

B

Cone

14 The net for this 3D shape would have what parts?



A

2 hexagons 6 rectangles

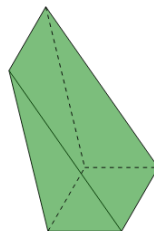
B

2 circles 1 rectangle

C

2 triangles 3 rectangles

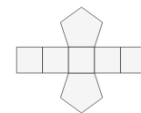
15 What net would make this 3D shape?



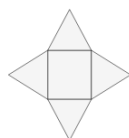
A



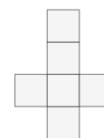
B



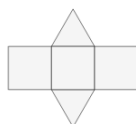
C



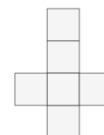
D

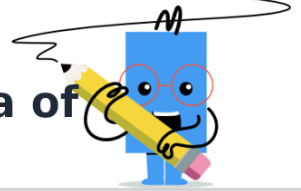


E



F





Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

16 What is the formula for the volume of this shape?

A Cylinder with radius 4 and height 3

A

$$V = \pi \cdot 4^2 \cdot 3$$

B

$$V = 2\pi \cdot 4 \cdot 3 + 2\pi \cdot 4^2$$

18 What shape would this formula calculate the surface area for?

$$SA = 4\pi r^2$$

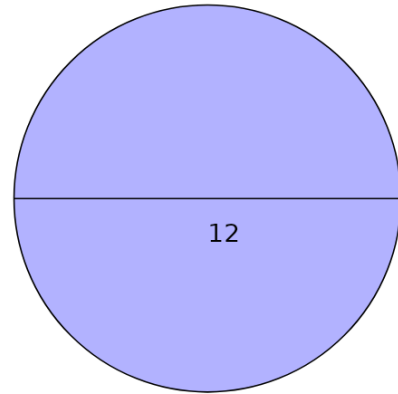
A

Cylinder

B

Sphere

17 What is the area in terms of π ?



A

$$27\pi$$

B

$$15\pi$$

C

$$30\pi$$

D

$$12\pi$$

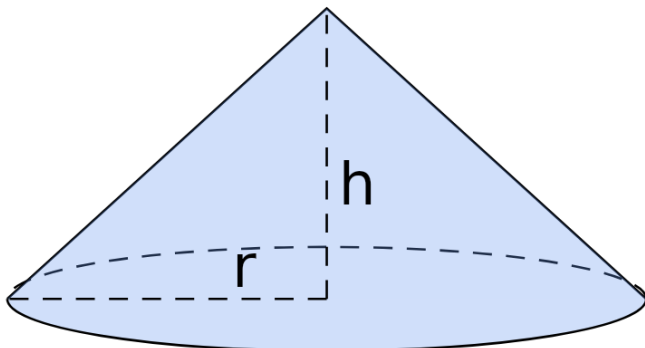
E

$$36\pi$$

F

$$63\pi$$

19 What is the formula for the surface area of this Cone?

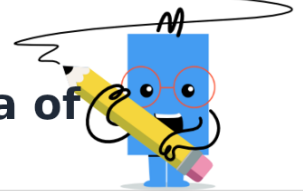


A

$$SA = \pi r(r + \sqrt{h^2 + r^2})$$

B

$$SA = \frac{1}{3}h\pi r^2$$

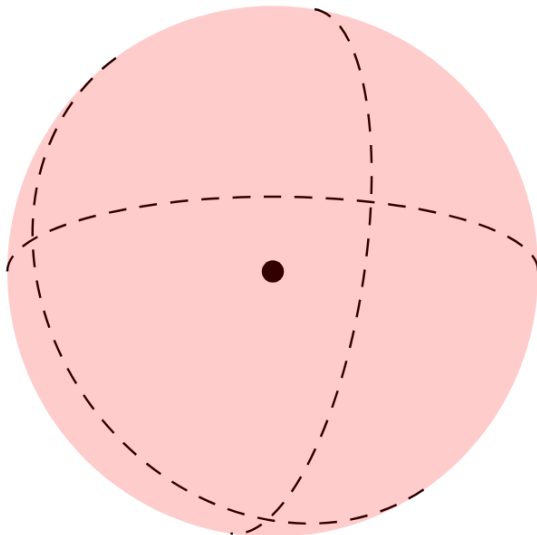


Geometry - Volume and Surface Area of Complex 3D Shapes - Intro

20 Which shape would this formula calculate the surface area for?

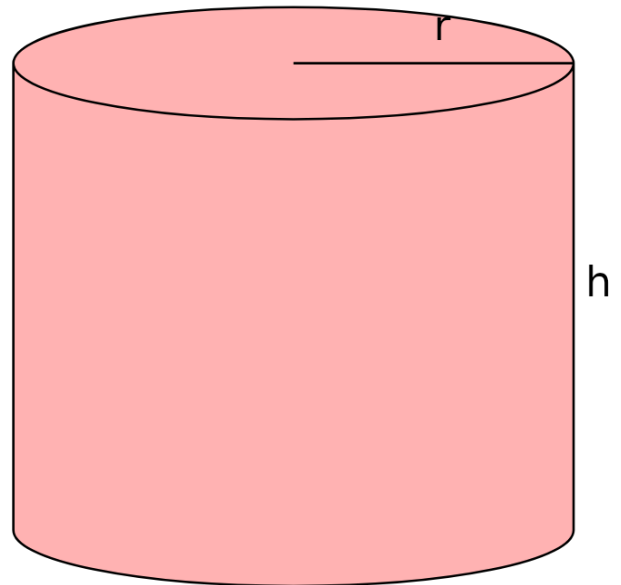
$$SA = 4\pi r^2$$

A



radius = r

B



21 What is the formula for the surface area of this shape?

A Cylinder with radius 5 and height 3

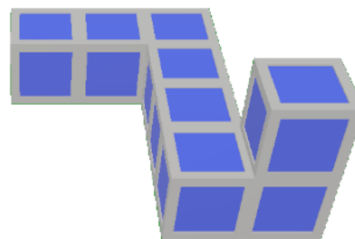
A

$$SA = \pi \cdot 5^2 \cdot 3$$

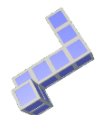
B

$$SA = 2\pi \cdot 5 \cdot 3 + 2\pi \cdot 5^2$$

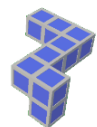
22 Which answer is a rotation of this shape?



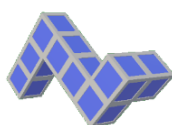
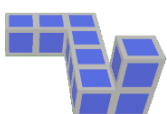
A



B



23 Is the second shape a rotation of the first?



A

yes

B

no