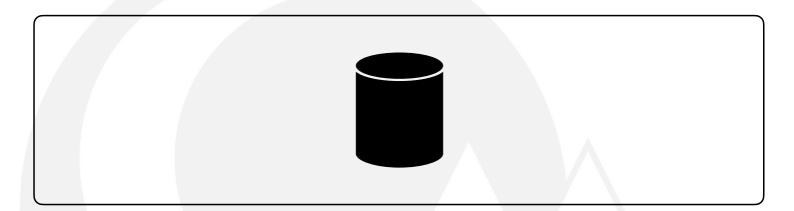
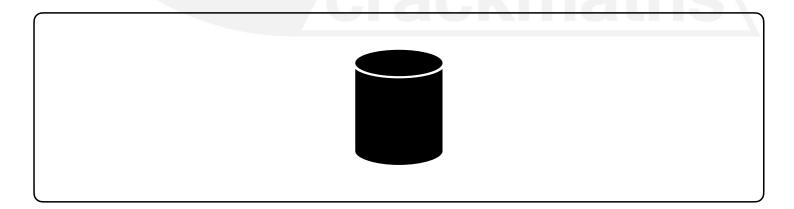


Scenario Questions: Round answers to 1 decimal places, use $\pi = 3.14$, 1 litre = 1000cm³, 1cm³ = 1ml

1. A cylindrical juice container has a volume of 500 millilitres. If the radius of the container is 5 centimeters, what is the height of the container?



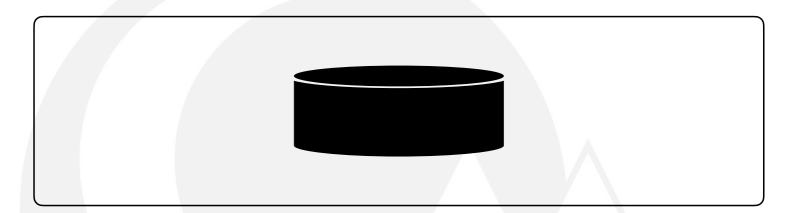
2. The volume of a cylindrical soda can is 250 cubic centimeters. If the radius of the can is 3 centimeters, what is the height of the can?



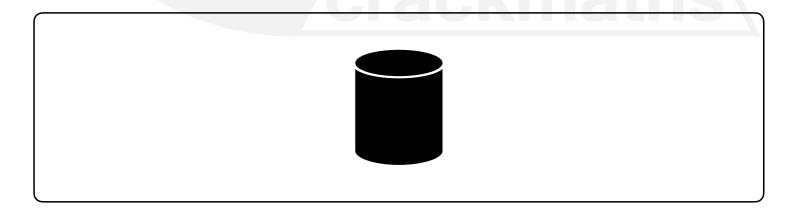


Scenario Questions: Round answers to 1 decimal places, use $\pi = 3.14$, 1 litre = 1000cm³, 1cm³ = 1ml

3. A cylindrical vase has a height of 10 inches. If the radius of the vase is 6 inches, what is the volume of the vase?



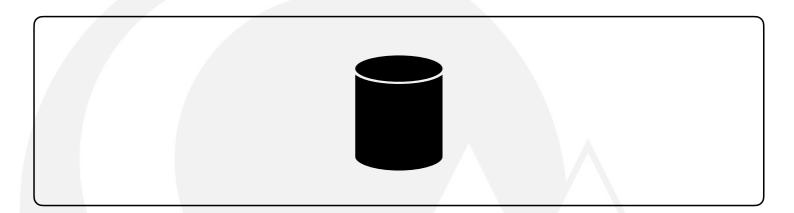
4. The volume of a cylindrical pencil holder is 200 cubic centimeters. If the height of the holder is 10 centimeters, what is the area of the circular base?



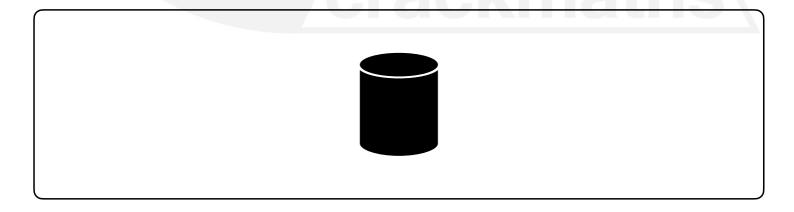


Scenario Questions: Round answers to 1 decimal places, use $\pi = 3.14$, 1 litre = 1000cm³, 1cm³ = 1ml

5. A cylindrical coffee mug has a height of 100 millimeters. If the radius of the mug is 35 millimeters, what is the volume of the mug in cm³?



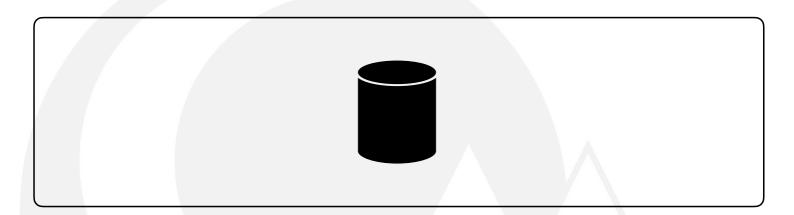
6. You have 800 millilitres of paint. Each tin can has a radius of 5 centimeters and a height of 10 centimeters. How many tin cans can you fill with the paint?



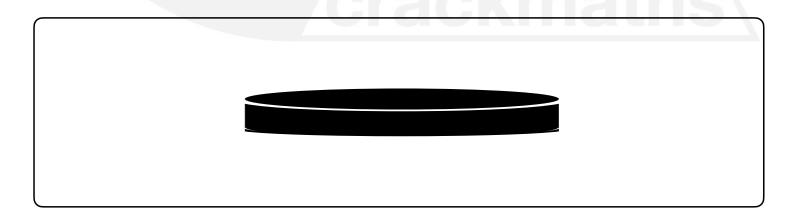


Scenario Questions: Round answers to 1 decimal places, use $\pi = 3.14$, 1 litre = 1000cm³, 1cm³ = 1ml

7. You have 1.5 litres of cola. Each soda can has a radius of 3 centimeters and a height of 11 centimeters. How many soda cans can you fill with the cola?



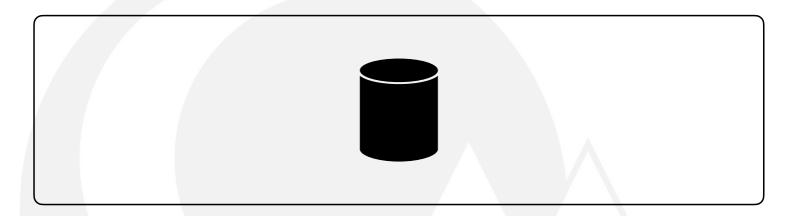
8. You have 500 cubic inches of cookie dough. Each cylindrical cookie has a radius of 6 inches and a height of 0.5 inches. How many cookie can you make with the dough?



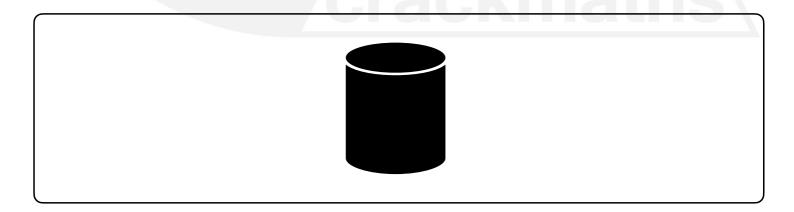


Scenario Questions: Round answers to 1 decimal places, use π = 3.14, 1 litre = 1000cm³, 1cm³ = 1ml

9. You have 750 millilitres of shampoo. Each shampoo bottle has a radius of 3 centimeters and a height of 15 centimeters. How many shampoo bottles can you fill with the shampoo?



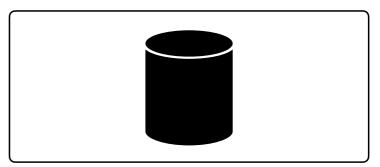
10. You have 1 litre of olive oil. Each cylindrical oil bottle has a radius of 7 centimeters and a height of 20 centimeters. How many oil bottles can you fill with the olive oil?





Scenario Questions: Answers

1. A cylindrical juice container has a volume of 500 millilitres. If the radius of the container is 5 centimeters, what is the height of the container?



1. The height of the container is 6.4cm.

2. The volume of a cylindrical soda can is 250 cubic centimeters. If the radius of the can is 3 centimeters, what is the height of the can?



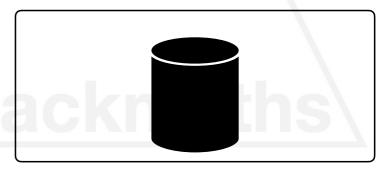
2. The height of the can is 8.8cm.

3. A cylindrical vase has a height of 10 inches. If the radius of the vase is 6 inches, what is the volume of the vase?



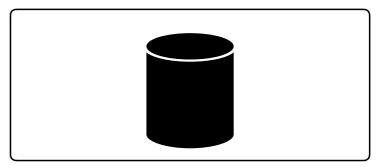
3. The volume of the vase is 1130.4 cubic inches.

4. The volume of a cylindrical pencil holder is 200 cubic centimeters. If the height of the holder is 10 centimeters, what is the area of the circular base?



4. The area of the circular base is 20 cm².

5. A cylindrical coffee mug has a height of 100 millimeters. If the radius of the mug is 35 millimeters, what is the volume of the mug in cm³?

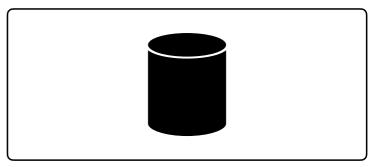


5. The volume of the mug is 384.7 cm³.



Scenario Questions: Answers

6. You have 800 millilitres of paint. Each tin can has a radius of 5 centimeters and a height of 10 centimeters. How many tin cans can you fill with the paint?



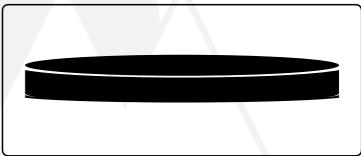
6. You can fill 1 tin can (785 ml) with 15 ml of paint left over.

7. You have 1.5 litres of cola. Each soda can has a radius of 3 centimeters and a height of 11 centimeters. How many soda cans can you fill with the cola?



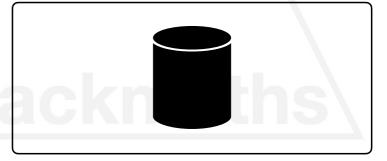
7. You can fill 4 cans (310 ml) with 0.256 litres of cola left over.

8. You have 500 cubic inches of cookie dough. Each cylindrical cookie has a radius of 6 inches and a height of 0.5 inches. How many cookie can you make with the dough?



8. You can make 8 cookies (56.52 cubic inches) with 47 cubic inches of mix left

9. You have 750 millilitres of shampoo. Each shampoo bottle has a radius of 3 centimeters and a height of 15 centimeters. How many shampoo bottles can you fill with the shampoo?



9. You can fill 1 shampoo bottle (423.9 ml) with 326.1 ml of shampoo left over.

10. You have 1 litre of olive oil. Each cylindrical oil bottle has a radius of 7 centimeters and a height of 20 centimeters. How many oil bottles can you fill with the olive oil?

