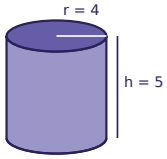
Volume: Changing Radius & Height · 1

A cylinder and a cone have the same radius and the same height. The cylinder holds 180 cubic cm. How much does the cone hold, in cubic cm?

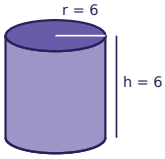
Volume: Changing Radius & Height · 2

A cylinder has a volume of 80π cubic cm and a radius of 4 cm. What is its height, in cm?



Volume: Changing Radius & Height · 3

A cylinder has a volume of 216π cubic cm and a radius of 6 cm. What is its height, in cm?



Volume: Changing Radius & Height · 4

A cylinder has a volume of 36 cubic inches. Its radius is multiplied by 5. What is the new volume, in cubic inches?

Volume: Changing Radius & Height · 5

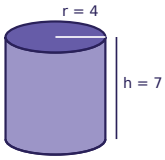
The radius of a cylinder triples and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 6

A cylinder has a volume of 6 cubic inches. Its radius triples. What is the new volume, in cubic inches?

Volume: Changing Radius & Height · 7

A cylinder has a volume of 112π cubic cm and a radius of 4 cm. What is its height, in cm?



Volume: Changing Radius & Height · 8

The radius of a cylinder is multiplied by 4 and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 2

ANSWER

5

Volume: Changing Radius & Height · 1

ANSWER

60

Volume: Changing Radius & Height · 4

ANSWER

900

Volume: Changing Radius & Height · 3

ANSWER

6

Volume: Changing Radius & Height · 6

ANSWER

54

Volume: Changing Radius & Height · 5

ANSWER

9

Volume: Changing Radius & Height · 8

ANSWER

16

Volume: Changing Radius & Height · 7

ANSWER

7

Volume: Changing Radius & Height · 9

The radius of a cone triples and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 10

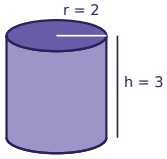
A cylinder has a volume of 59 cubic inches. Its radius doubles. What is the new volume, in cubic inches?

Volume: Changing Radius & Height · 11

A cylinder and a cone have the same radius and the same height. The cylinder holds 333 cubic cm. How much does the cone hold, in cubic cm?

Volume: Changing Radius & Height · 12

A cylinder has a volume of 12π cubic cm and a radius of 2 cm. What is its height, in cm?

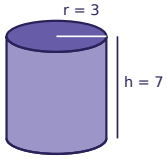


Volume: Changing Radius & Height · 13

The height of a cylinder triples and its radius stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 14

A cylinder has a volume of 63π cubic cm and a radius of 3 cm. What is its height, in cm?

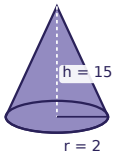


Volume: Changing Radius & Height · 15

A cylinder has a volume of 24 cubic inches. Its radius is multiplied by 4. What is the new volume, in cubic inches?

Volume: Changing Radius & Height · 16

A cone has a volume of 20π cubic cm and a radius of 2 cm. What is its height, in cm?



Volume: Changing Radius & Height · 10

ANSWER

236

Volume: Changing Radius & Height · 9

ANSWER

9

Volume: Changing Radius & Height · 12

ANSWER

3

Volume: Changing Radius & Height · 11

ANSWER

111

Volume: Changing Radius & Height · 14

ANSWER

7

Volume: Changing Radius & Height · 13

ANSWER

3

Volume: Changing Radius & Height · 16

ANSWER

15

Volume: Changing Radius & Height · 15

ANSWER

384

Volume: Changing Radius & Height · 17

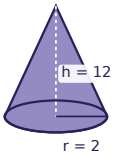
The length and the width of a rectangular prism both are multiplied by 4, and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 18

The length and the width of a rectangular prism both are multiplied by 5, and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 19

A cone has a volume of 16π cubic cm and a radius of 2 cm. What is its height, in cm?



Volume: Changing Radius & Height · 20

A cylinder's radius doubles and its height triples. How many times as large is the new volume?

Volume: Changing Radius & Height · 21

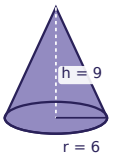
The length and the width of a rectangular prism both double, and its height stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 22

A cylinder has a volume of 14 cubic inches. Its radius is multiplied by 5. What is the new volume, in cubic inches?

Volume: Changing Radius & Height · 23

A cone has a volume of 108π cubic cm and a radius of 6 cm. What is its height, in cm?



Volume: Changing Radius & Height · 24

The height of a cylinder is multiplied by 5 and its radius stays the same. How many times as large is the new volume?

Volume: Changing Radius & Height · 18

ANSWER

25

Volume: Changing Radius & Height · 17

ANSWER

16

Volume: Changing Radius & Height · 20

ANSWER

12

Volume: Changing Radius & Height · 19

ANSWER

12

Volume: Changing Radius & Height · 22

ANSWER

350

Volume: Changing Radius & Height · 21

ANSWER

4

Volume: Changing Radius & Height · 24

ANSWER

5

Volume: Changing Radius & Height · 23

ANSWER

9