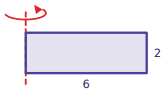
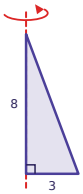
Solids of Revolution · 1

A 6 by 2 rectangle is rotated about its side of length 2. Find the volume of the solid in terms of π.



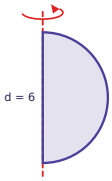
Solids of Revolution · 2

A right triangle with legs 3 and 8 is rotated about the leg of length 8. Find the volume of the solid in terms of π.



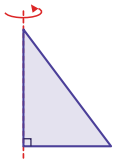
Solids of Revolution · 3

A semicircle with diameter 6 is rotated about its diameter. Find the volume of the solid in terms of π.



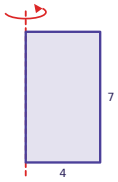
Solids of Revolution · 4

A right triangle is rotated all the way around one of its legs. What solid is formed?



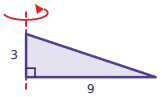
Solids of Revolution · 5

A 4 by 7 rectangle is rotated about its side of length 7. Find the volume of the solid in terms of π.



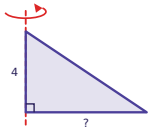
Solids of Revolution · 6

A right triangle with legs 9 and 3 is rotated about the leg of length 3. Find the volume of the solid in terms of π.



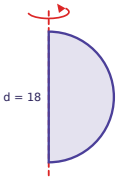
Solids of Revolution · 7

A right triangle is rotated about its leg of length 4, making a cone with volume 48π. How long is the other leg?



Solids of Revolution · 8

A semicircle with diameter 18 is rotated about its diameter. Find the volume of the solid in terms of π.



Solids of Revolution · 2

ANSWER

24π

Solids of Revolution · 1

ANSWER

72π

Solids of Revolution · 4

ANSWER

cone

Solids of Revolution · 3

ANSWER

36π

Solids of Revolution · 6

ANSWER

81π

Solids of Revolution · 5

ANSWER

112π

Solids of Revolution · 8

ANSWER

972π

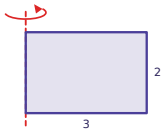
Solids of Revolution · 7

ANSWER

6

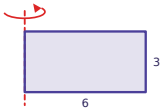
Solids of Revolution · 9

A 3 by 2 rectangle is rotated about its side of length 2. Find the volume of the solid in terms of π.



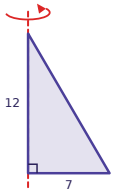
Solids of Revolution · 10

A 6 by 3 rectangle is rotated about its side of length 3. Find the volume of the solid in terms of π.



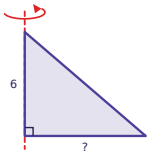
Solids of Revolution · 11

A right triangle with legs 7 and 12 is rotated about the leg of length 12. Find the volume of the solid in terms of π.



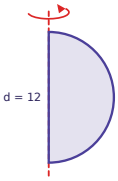
Solids of Revolution · 12

A right triangle is rotated about its leg of length 6, making a cone with volume 98π. How long is the other leg?



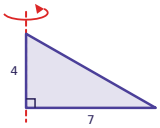
Solids of Revolution · 13

A semicircle with diameter 12 is rotated about its diameter. Find the volume of the solid in terms of π.



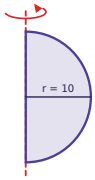
Solids of Revolution · 14

A right triangle with legs 7 and 4 is rotated about the leg of length 4. Find the volume of the solid to the nearest tenth.



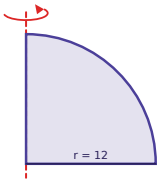
Solids of Revolution · 15

A semicircle with radius 10 is rotated about its diameter. Find the volume of the solid to the nearest tenth.



Solids of Revolution · 16

A quarter circle with radius 12 is rotated about one of its straight edges. Find the volume of the solid in terms of π.



Solids of Revolution · 10

ANSWER

108π

Solids of Revolution · 9

ANSWER

18π

Solids of Revolution · 12

ANSWER

7

Solids of Revolution · 11

ANSWER

196π

Solids of Revolution · 14

ANSWER

205.3

Solids of Revolution · 13

ANSWER

288π

Solids of Revolution · 16

ANSWER

1152π

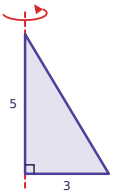
Solids of Revolution · 15

ANSWER

4188.8

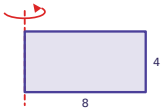
Solids of Revolution · 17

A right triangle with legs 3 and 5 is rotated about the leg of length 5. Find the volume of the solid in terms of π.



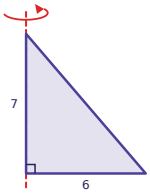
Solids of Revolution · 18

A 8 by 4 rectangle is rotated about its side of length 4. Find the volume of the solid in terms of π.



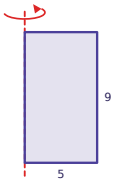
Solids of Revolution · 19

A right triangle with legs 6 and 7 is rotated about the leg of length 7. Find the volume of the solid in terms of π.



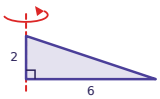
Solids of Revolution · 20

A 5 by 9 rectangle is rotated about its side of length 9. Find the volume of the solid in terms of π.



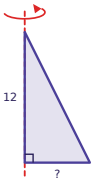
Solids of Revolution · 21

A right triangle with legs 6 and 2 is rotated about the leg of length 2. Find the volume of the solid in terms of π.



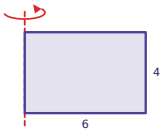
Solids of Revolution · 22

A right triangle is rotated about its leg of length 12, making a cone with volume 144π. How long is the other leg?



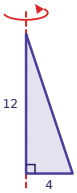
Solids of Revolution · 23

A 6 by 4 rectangle is rotated about its side of length 4. Find the volume of the solid in terms of π.



Solids of Revolution · 24

A right triangle with legs 4 and 12 is rotated about the leg of length 12. Find the volume of the solid in terms of π.



Solids of Revolution · 18

ANSWER

256π

Solids of Revolution · 17

ANSWER

15π

Solids of Revolution · 20

ANSWER

225π

Solids of Revolution · 19

ANSWER

84π

Solids of Revolution · 22

ANSWER

6

Solids of Revolution · 21

ANSWER

24π

Solids of Revolution · 24

ANSWER

64π

Solids of Revolution · 23

ANSWER

144π