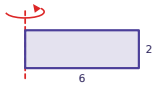
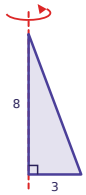
Task card 1 Solids of Revolution

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



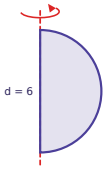
Task card 2 Solids of Revolution

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.



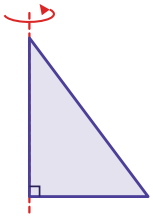
Task card 3 Solids of Revolution

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



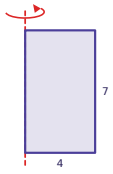
Task card 4 Solids of Revolution

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



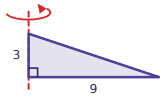
Task card 5 Solids of Revolution

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



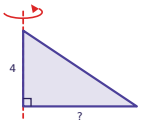
Task card 6 Solids of Revolution

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.



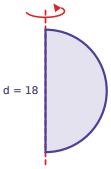
Task card 7 Solids of Revolution

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



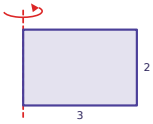
Task card 8 Solids of Revolution

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



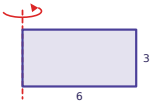
Task card 9 Solids of Revolution

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



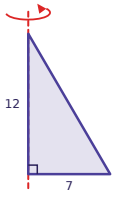
Task card 10 Solids of Revolution

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



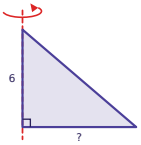
Task card 11 Solids of Revolution

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.



Task card 12 Solids of Revolution

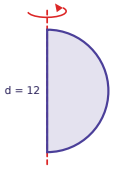
A right triangle is rotated about its leg of length 6, making a cone with volume 98π. How long is the other leg?



Task card 13

Solids of Revolution

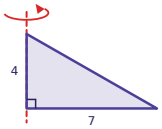
A semicircle with diameter 12 is rotated about its diameter. Find the volume of the solid in terms of π.



Task card 14

Solids of Revolution

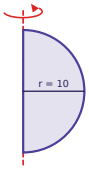
A right triangle with legs 7 and 4 is rotated about the leg of length 4. Find the volume of the solid to the nearest tenth.



Task card 15

Solids of Revolution

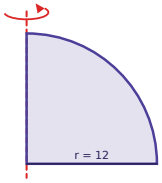
A semicircle with radius 10 is rotated about its diameter. Find the volume of the solid to the nearest tenth.



Task card 16

Solids of Revolution

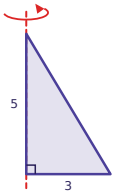
A quarter circle with radius 12 is rotated about one of its straight edges. Find the volume of the solid in terms of π.



Task card 17

Solids of Revolution

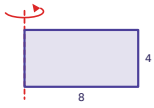
A right triangle with legs 3 and 5 is rotated about the leg of length 5. Find the volume of the solid in terms of π.



Task card 18

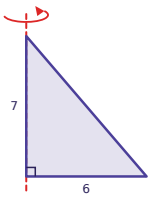
Solids of Revolution

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



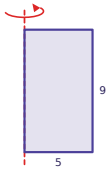
Task card 19 Solids of Revolution

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.



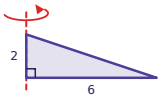
Task card 20 Solids of Revolution

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



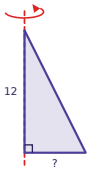
Task card 21 Solids of Revolution

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.



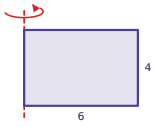
Task card 22 Solids of Revolution

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



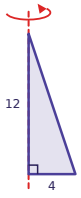
Task card 23 Solids of Revolution

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



Task card 24 Solids of Revolution

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 Task Cards

Recording sheet · Grade 10 · Name a solid with one word: cylinder, cone, sphere or hemisphere. Give volumes in terms of π, like 36π, unless the problem says to round; then use the π key and round to the nearest tenth (like 52.4). Other lengths are numbers.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Solids of Revolution Task Cards: Answer Key

Grade 10 · Medium

The answers online

1. 72π	**2.** 24π	**3.** 36π
4. cone	**5.** 112π	**6.** 81π
7. 6	**8.** 972π	**9.** 18π
10. 108π	**11.** 196π	**12.** 7
13. 288π	**14.** 205.3	**15.** 4188.8
16. 1152π	**17.** 15π	**18.** 256π
19. 84π	**20.** 225π	**21.** 24π
22. 6	**23.** 144π	**24.** 64π