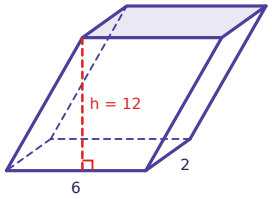
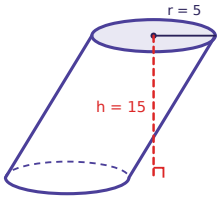
Task card 1 Cavalieri's Principle & Oblique So...

An oblique prism has a 6 by 2 rectangular base and a height of 12. Find its volume.



Task card 2 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 5 and height 15. Find its volume in terms of π.

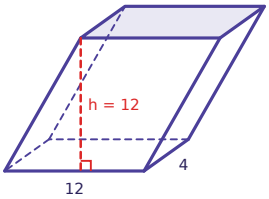


Task card 3 Cavalieri's Principle & Oblique So...

A right prism has a 9 by 9 square base and height 8. An oblique prism has the same base and height 9. Do they have the same volume?

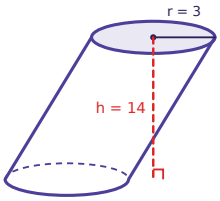
Task card 4 Cavalieri's Principle & Oblique So...

An oblique prism has a 12 by 4 rectangular base and a height of 12. Find its volume.



Task card 5 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 3 and height 14. Find its volume in terms of π.



Task card 6 Cavalieri's Principle & Oblique So...

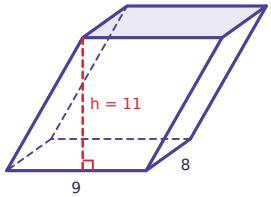
15 square tiles, each 11 cm by 11 cm and 1 cm thick, are stacked and then pushed into a leaning stack. Find the volume of the leaning stack in cubic centimeters.

Task card 7 Cavalieri's Principle & Oblique So...

A right prism has a 9 by 9 square base and height 12. An oblique prism has the same base and height 15. Do they have the same volume?

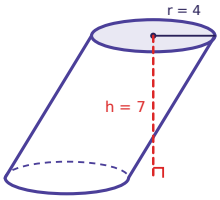
Task card 8 Cavalieri's Principle & Oblique So...

An oblique prism has a 9 by 8 rectangular base and a height of 11. Find its volume.



Task card 9 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 4 and height 7. Find its volume in terms of π.

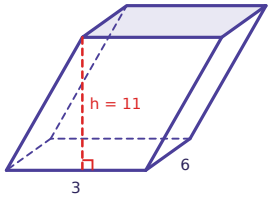


Task card 10 Cavalieri's Principle & Oblique So...

A right cylinder and an oblique cylinder both have radius 2 and height 9. Do they have the same volume?

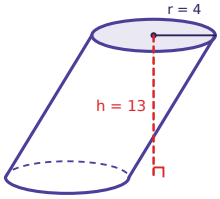
Task card 11 Cavalieri's Principle & Oblique So...

An oblique prism has a 3 by 6 rectangular base and a height of 11. Find its volume.



Task card 12 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 4 and height 13. Find its volume in terms of π.



Task card 13 Cavalieri's Principle & Oblique So...

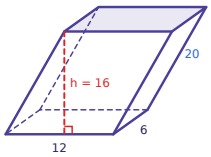
10 square tiles, each 15 cm by 15 cm and 1 cm thick, are stacked and then pushed into a leaning stack. Find the volume of the leaning stack in cubic centimeters.

Task card 14 Cavalieri's Principle & Oblique So...

A right prism has an 8 by 8 square base and height 6. An oblique prism has the same base and height 9. Do they have the same volume?

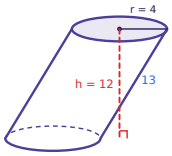
Task card 15 Cavalieri's Principle & Oblique So...

An oblique prism has a 12 by 6 rectangular base and a height of 16. Each slanted edge is 20 long. Find its volume.



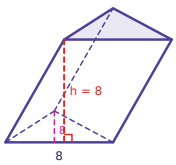
Task card 16 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 4 and height 12. Its slanted side is 13 long. Find its volume in terms of π.



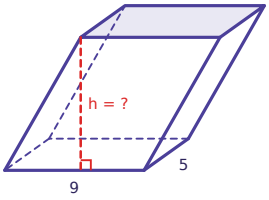
Task card 17 Cavalieri's Principle & Oblique So...

An oblique prism has a triangular base with base 8 and height 8. The height of the prism is 8. Find its volume.



Task card 18 Cavalieri's Principle & Oblique So...

An oblique prism with a 9 by 5 rectangular base has a volume of 405. Find its height.



Task card 19 Cavalieri's Principle & Oblique So...

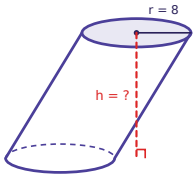
A right cylinder has radius 2 and height 7. An oblique cylinder has the same base and height 10. Do they have the same volume?

Task card 20 Cavalieri's Principle & Oblique So...

12 square tiles, each 11 cm by 11 cm and 1 cm thick, are stacked and then pushed into a leaning stack. Find the volume of the leaning stack in cubic centimeters.

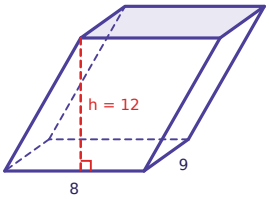
Task card 21 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 8 and volume 448π. Find its height.



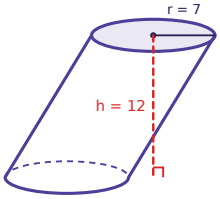
Task card 22 Cavalieri's Principle & Oblique So...

An oblique prism has an 8 by 9 rectangular base and a height of 12. Find its volume.



Task card 23 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 7 and height 12. Find its volume in terms of π.



Task card 24 Cavalieri's Principle & Oblique So...

A right cylinder has radius 9 and height 10. An oblique cylinder has the same base and a slanted side of length 10, leaning so its height is 8. Do they have the same volume?

Cavalieri's Principle & Oblique Solids Task Cards

Recording sheet · Grade 10 · Give the volume of a solid with a circular base in terms of π, like 48π; give other answers as numbers. Use the perpendicular height h, not the slanted edge. Answer yes or no when asked.

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

Cavalieri's Principle & Oblique Solids Task Cards: Answer Key

Grade 10 · Easy

The answers online

1. 144	**2.** 375π	**3.** no
4. 576	**5.** 126π	**6.** 1815
7. no	**8.** 792	**9.** 112π
10. yes	**11.** 198	**12.** 208π
13. 2250	**14.** no	**15.** 1152
16. 192π	**17.** 256	**18.** 9
19. no	**20.** 1452	**21.** 7
22. 864	**23.** 588π	**24.** no