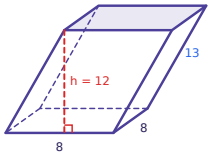
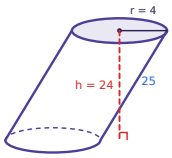
Task card 1 Cavalieri's Principle & Oblique So...

An oblique prism has an 8 by 8 rectangular base and a height of 12. Each slanted edge is 13 long. Find its volume.



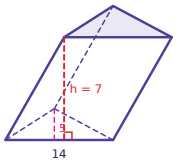
Task card 2 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 4 and height 24. Its slanted side is 25 long. Find its volume in terms of π.



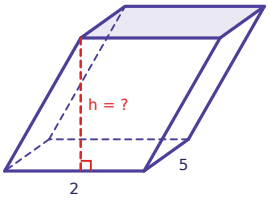
Task card 3 Cavalieri's Principle & Oblique So...

An oblique prism has a triangular base with base 14 and height 5. The height of the prism is 7. Find its volume.



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

An oblique prism with a 2 by 5 rectangular base has a volume of 30. Find its height.



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

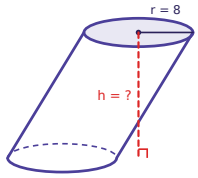
A right cylinder has radius 2 and height 8. An oblique cylinder has the same base and height 11. Do they have the same volume?

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

39 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.

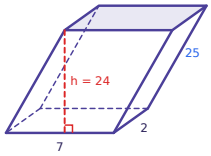
Task card 7 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 8 and volume 512π. Find its height.



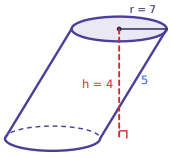
Task card 8 Cavalieri's Principle & Oblique So...

An oblique prism has a 7 by 2 rectangular base and a height of 24. Each slanted edge is 25 long. Find its volume.



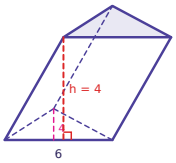
Task card 9 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 7 and height 4. Its slanted side is 5 long. Find its volume in terms of π.



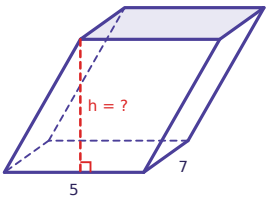
Task card 10 Cavalieri's Principle & Oblique So...

An oblique prism has a triangular base with base 6 and height 4. The height of the prism is 4. Find its volume.



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

An oblique prism with a 5 by 7 rectangular base has a volume of 350. Find its height.



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

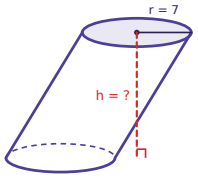
A right prism has a 5 by 5 square base and height 11. An oblique prism has the same base and height 15. Do they have the same volume?

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

32 square tiles, each 5 cm by 5 cm and 1 cm thick, are stacked and then pushed into a leaning stack. Find the volume of the leaning stack in cubic centimeters.

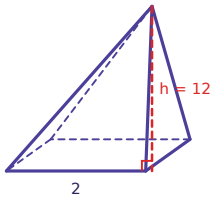
Task card 14 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 7 and volume 196π. Find its height.



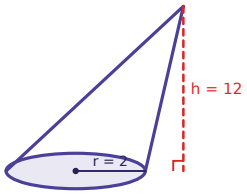
Task card 15 Cavalieri's Principle & Oblique So...

An oblique pyramid has a square base with side 2 and a height of 12. Find its volume.



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

An oblique cone has radius 2 and height 12. Find its volume in terms of π.

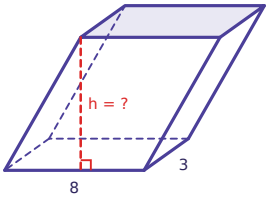


Task card 17 Cavalieri's Principle & Oblique So...

Solid A is a right prism with an 8 by 3 rectangular base and height 7. Solid B is an oblique prism with a 6 by 4 rectangular base and height 7. Do A and B have the same volume?

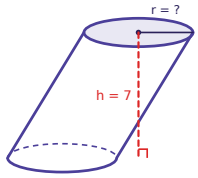
Task card 18 Cavalieri's Principle & Oblique So...

An oblique prism with an 8 by 3 rectangular base has a volume of 192. Find its height.



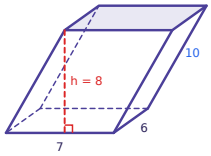
Task card 19 Cavalieri's Principle & Oblique So...

An oblique cylinder has height 7 and volume 448π. Find its radius.



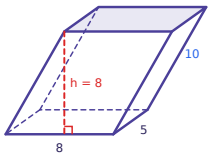
Task card 20 Cavalieri's Principle & Oblique So...

An oblique prism has a 7 by 6 rectangular base and a height of 8. Each slanted edge is 10 long. Find its volume.



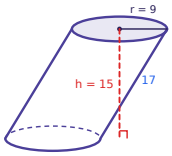
Task card 21 Cavalieri's Principle & Oblique So...

An oblique prism has an 8 by 5 rectangular base and a height of 8. Each slanted edge is 10 long. Find its volume.



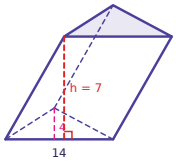
Task card 22 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 9 and height 15. Its slanted side is 17 long. Find its volume in terms of π.



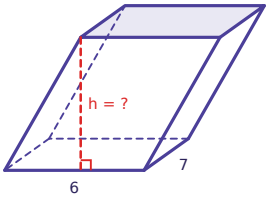
Task card 23 Cavalieri's Principle & Oblique So...

An oblique prism has a triangular base with base 14 and height 4. The height of the prism is 7. Find its volume.



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

An oblique prism with a 6 by 7 rectangular base has a volume of 126. Find its height.



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 · Medium

The answers online

1. 768	**2.** 384π	**3.** 245
4. 3	**5.** no	**6.** 4719
7. 8	**8.** 336	**9.** 196π
10. 48	**11.** 10	**12.** no
13. 800	**14.** 4	**15.** 16
16. 16π	**17.** yes	**18.** 8
19. 8	**20.** 336	**21.** 320
22. 1215π	**23.** 196	**24.** 3