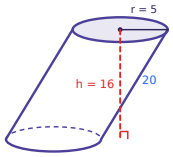
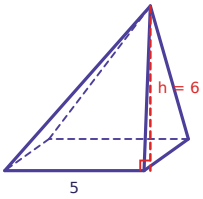
Task card 1 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 5 and height 16. Its slanted side is 20 long. Find its volume in terms of π.



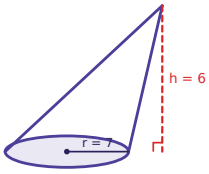
Task card 2 Cavalieri's Principle & Oblique So...

An oblique pyramid has a square base with side 5 and a height of 6. Find its volume.



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

An oblique cone has radius 7 and height 6. Find its volume in terms of π.

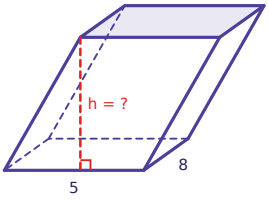


Task card 4 Cavalieri's Principle & Oblique So...

Solid A is a right prism with an 8 by 3 rectangular base and height 13. Solid B is an oblique prism with a 6 by 4 rectangular base and height 13. Do A and B have the same volume?

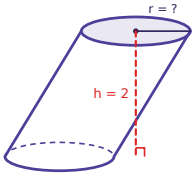
Task card 5 Cavalieri's Principle & Oblique So...

An oblique prism with a 5 by 8 rectangular base has a volume of 160. Find its height.



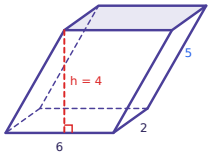
Task card 6 Cavalieri's Principle & Oblique So...

An oblique cylinder has height 2 and volume 162π. Find its radius.



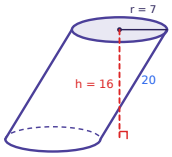
Task card 7 Cavalieri's Principle & Oblique So...

An oblique prism has a 6 by 2 rectangular base and a height of 4. Each slanted edge is 5 long. Find its volume.



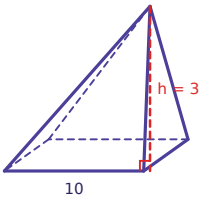
Task card 8 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 7 and height 16. Its slanted side is 20 long. Find its volume in terms of π.



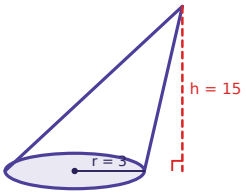
Task card 9 Cavalieri's Principle & Oblique So...

An oblique pyramid has a square base with side 10 and a height of 3. Find its volume.



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

An oblique cone has radius 3 and height 15. Find its volume in terms of π.

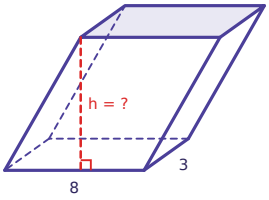


Task card 11 Cavalieri's Principle & Oblique So...

Solid A is a right prism with a 6 by 6 rectangular base and height 6. Solid B is an oblique prism with a 3 by 12 rectangular base and height 6. Do A and B have the same volume?

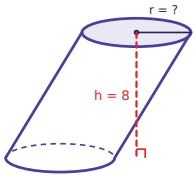
Task card 12 Cavalieri's Principle & Oblique So...

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



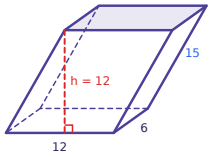
Task card 13 Cavalieri's Principle & Oblique So...

An oblique cylinder has height 8 and volume 128π. Find its radius.



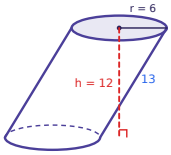
Task card 14 Cavalieri's Principle & Oblique So...

An oblique prism has a 12 by 6 rectangular base and a height of 12. Each slanted edge is 15 long. Find its volume.



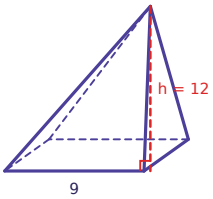
Task card 15 Cavalieri's Principle & Oblique So...

An oblique cylinder has radius 6 and height 12. Its slanted side is 13 long. Find its volume in terms of π.



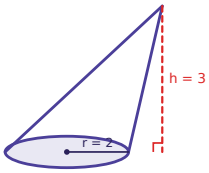
Task card 16 Cavalieri's Principle & Oblique So...

An oblique pyramid has a square base with side 9 and a height of 12. Find its volume.



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

An oblique cone has radius 2 and height 3. Find its volume in terms of π.

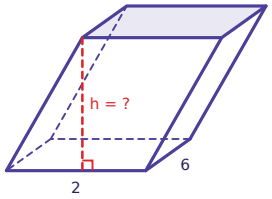


Task card 18 Cavalieri's Principle & Oblique So...

Solid A is a right prism with a 6 by 6 rectangular base and height 5. Solid B is an oblique prism with a 3 by 12 rectangular base and height 5. Do A and B have the same volume?

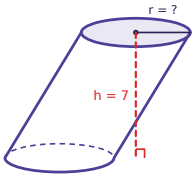
Task card 19 Cavalieri's Principle & Oblique So...

An oblique prism with a 2 by 6 rectangular base has a volume of 72. Find its height.



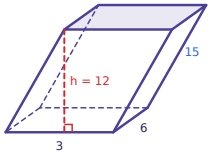
Task card 20 Cavalieri's Principle & Oblique So...

An oblique cylinder has height 7 and volume 567π. Find its radius.



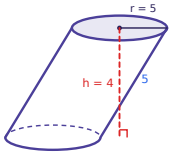
Task card 21 Cavalieri's Principle & Oblique So...

An oblique prism has a 3 by 6 rectangular base and a height of 12. Each slanted edge is 15 long. Find its volume.



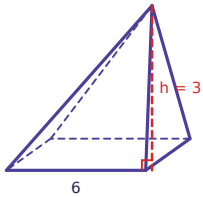
Task card 22 Cavalieri's Principle & Oblique So...

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



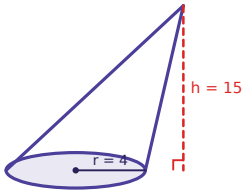
Task card 23 Cavalieri's Principle & Oblique So...

An oblique pyramid has a square base with side 6 and a height of 3. Find its volume.



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

An oblique cone has radius 4 and height 15. Find its volume in terms of π.



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 · Hard

The answers online

1. 400π	**2.** 50	**3.** 98π
4. yes	**5.** 4	**6.** 9
7. 48	**8.** 784π	**9.** 100
10. 45π	**11.** yes	**12.** 8
13. 4	**14.** 864	**15.** 432π
16. 324	**17.** 4π	**18.** yes
19. 6	**20.** 9	**21.** 216
22. 100π	**23.** 36	**24.** 80π