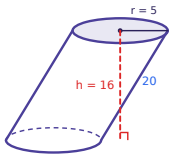
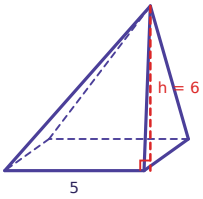
**Task card 1** Cavalieri's Principle & Oblique So...

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



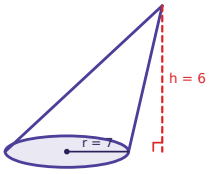

**Task card 2** Cavalieri's Principle & Oblique So...

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.

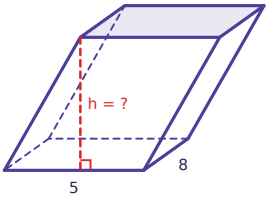



**Task card 4** Cavalieri's Principle & Oblique So...

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?

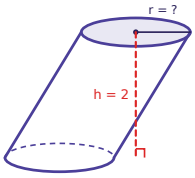
**Task card 5** Cavalieri's Principle & Oblique So...

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



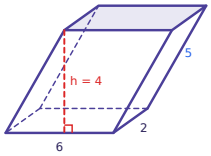

**Task card 6** Cavalieri's Principle & Oblique So...

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



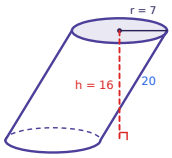
**Task card 7** Cavalieri's Principle & Oblique So...

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



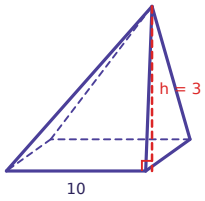

**Task card 8** Cavalieri's Principle & Oblique So...

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



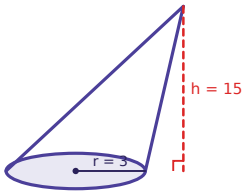

**Task card 9** Cavalieri's Principle & Oblique So...

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.

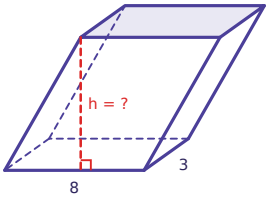



**Task card 11** Cavalieri's Principle & Oblique So...

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?

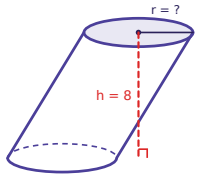
**Task card 12** Cavalieri's Principle & Oblique So...

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



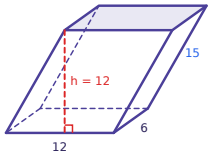
**Task card 13** Cavalieri's Principle & Oblique So...

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



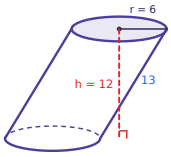

**Task card 14** Cavalieri's Principle & Oblique So...

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



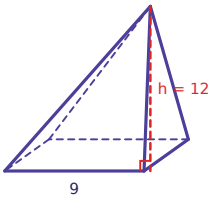

**Task card 15** Cavalieri's Principle & Oblique So...

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



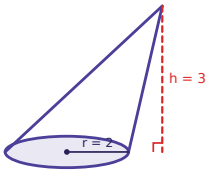

**Task card 16** Cavalieri's Principle & Oblique So...

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.

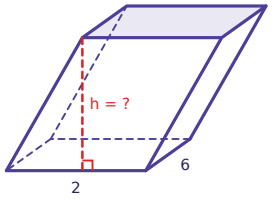



**Task card 18** Cavalieri's Principle & Oblique So...

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?

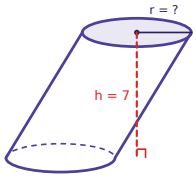
**Task card 19** Cavalieri's Principle & Oblique So...

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



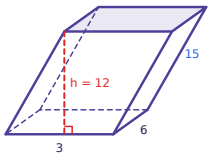

**Task card 20** Cavalieri's Principle & Oblique So...

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



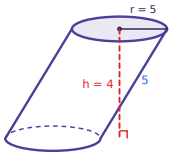

**Task card 21** Cavalieri's Principle & Oblique So...

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



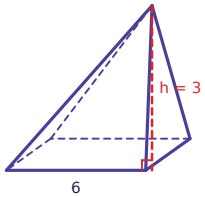

**Task card 22** Cavalieri's Principle & Oblique So...

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



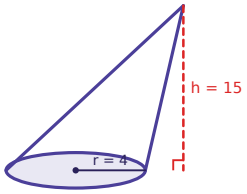

**Task card 23** Cavalieri's Principle & Oblique So...

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 |