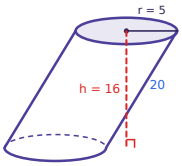
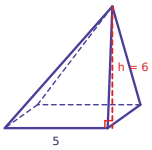
Cavalieri's Principle & Oblique Solids · 1

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



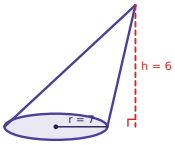
Cavalieri's Principle & Oblique Solids · 2

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



Cavalieri's Principle & Oblique Solids · 3

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

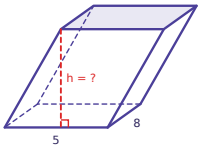


Cavalieri's Principle & Oblique Solids · 4

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?

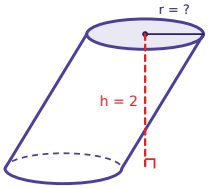
Cavalieri's Principle & Oblique Solids · 5

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



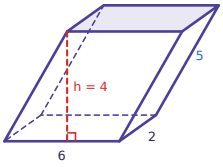
Cavalieri's Principle & Oblique Solids · 6

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



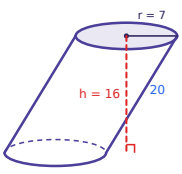
Cavalieri's Principle & Oblique Solids · 7

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



Cavalieri's Principle & Oblique Solids · 8

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



Cavalieri's Principle & Oblique Solids · 2

ANSWER

50

Cavalieri's Principle & Oblique Solids · 1

ANSWER

400π

Cavalieri's Principle & Oblique Solids · 4

ANSWER

yes

Cavalieri's Principle & Oblique Solids · 3

ANSWER

98π

Cavalieri's Principle & Oblique Solids · 6

ANSWER

9

Cavalieri's Principle & Oblique Solids · 5

ANSWER

4

Cavalieri's Principle & Oblique Solids · 8

ANSWER

784π

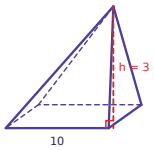
Cavalieri's Principle & Oblique Solids · 7

ANSWER

48

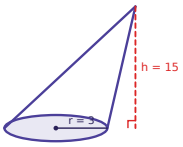
Cavalieri's Principle & Oblique Solids · 9

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



Cavalieri's Principle & Oblique Solids · 10

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

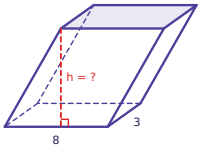


Cavalieri's Principle & Oblique Solids · 11

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?

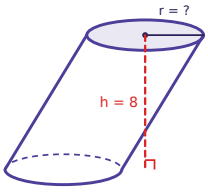
Cavalieri's Principle & Oblique Solids · 12

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



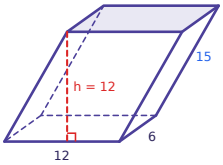
Cavalieri's Principle & Oblique Solids · 13

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



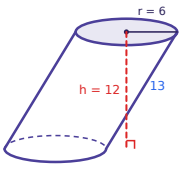
Cavalieri's Principle & Oblique Solids · 14

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



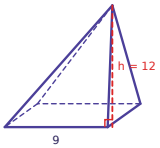
Cavalieri's Principle & Oblique Solids · 15

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



Cavalieri's Principle & Oblique Solids · 16

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



Cavalieri's Principle & Oblique Solids · 10

ANSWER

45π

Cavalieri's Principle & Oblique Solids · 9

ANSWER

100

Cavalieri's Principle & Oblique Solids · 12

ANSWER

8

Cavalieri's Principle & Oblique Solids · 11

ANSWER

yes

Cavalieri's Principle & Oblique Solids · 14

ANSWER

864

Cavalieri's Principle & Oblique Solids · 13

ANSWER

4

Cavalieri's Principle & Oblique Solids · 16

ANSWER

324

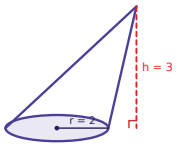
Cavalieri's Principle & Oblique Solids · 15

ANSWER

432π

Cavalieri's Principle & Oblique Solids · 17

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

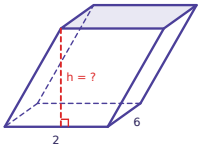


Cavalieri's Principle & Oblique Solids · 18

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?

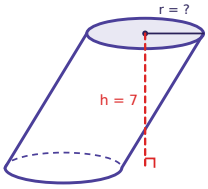
Cavalieri's Principle & Oblique Solids · 19

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



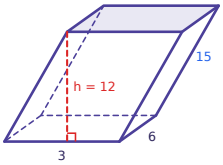
Cavalieri's Principle & Oblique Solids · 20

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



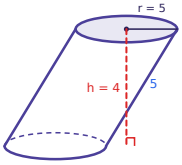
Cavalieri's Principle & Oblique Solids · 21

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



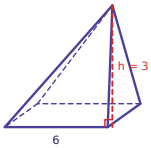
Cavalieri's Principle & Oblique Solids · 22

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



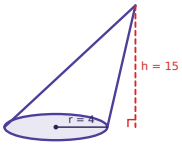
Cavalieri's Principle & Oblique Solids · 23

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



Cavalieri's Principle & Oblique Solids · 24

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



Cavalieri's Principle & Oblique Solids · 18

ANSWER

yes

Cavalieri's Principle & Oblique Solids · 17

ANSWER

4π

Cavalieri's Principle & Oblique Solids · 20

ANSWER

9

Cavalieri's Principle & Oblique Solids · 19

ANSWER

6

Cavalieri's Principle & Oblique Solids · 22

ANSWER

100π

Cavalieri's Principle & Oblique Solids · 21

ANSWER

216

Cavalieri's Principle & Oblique Solids · 24

ANSWER

80π

Cavalieri's Principle & Oblique Solids · 23

ANSWER

36