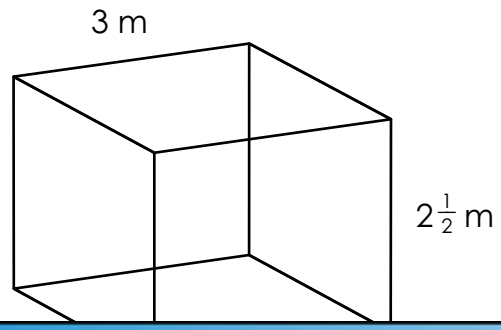
1. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{2}$–m cubes fit in the prism?



2. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of $\frac{3}{4}$ m, a width of $2\frac{1}{4}$ m, and a height of $1\frac{3}{4}$ m.

Fill in the rectangular prism volume formula using improper fractions.

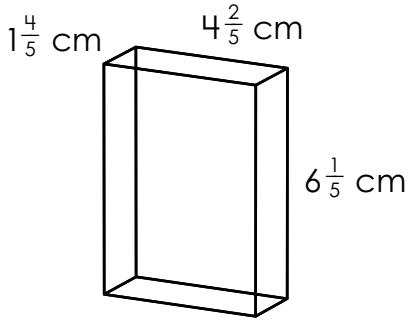
l = 4 mm

w = 3 mm

h = $2\frac{2}{3}$ mm

Remember to include the units in your answer.

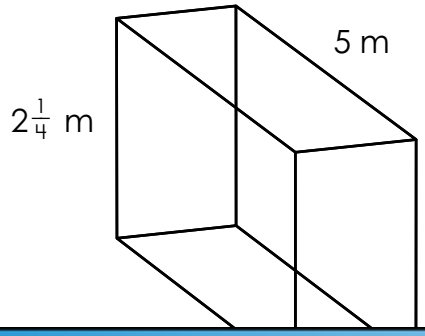
How many $\frac{1}{5}$–cm cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

5. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{4}$–cm cubes fit in the prism?



6. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

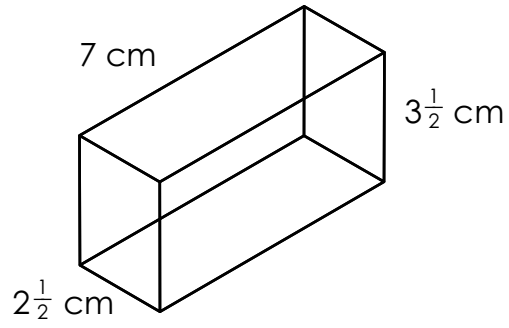
A rectangular prism has a length of $12\frac{1}{2}$ mm, a width of 10 mm, and a height of 4 mm.

Fill in the rectangular prism volume formula using improper fractions.

$$l = 1\frac{1}{5} \text{ km}$$
$$w = \frac{3}{5} \text{ km}$$
$$h = 1\frac{1}{5} \text{ km}$$

Remember to include the units in your answer.

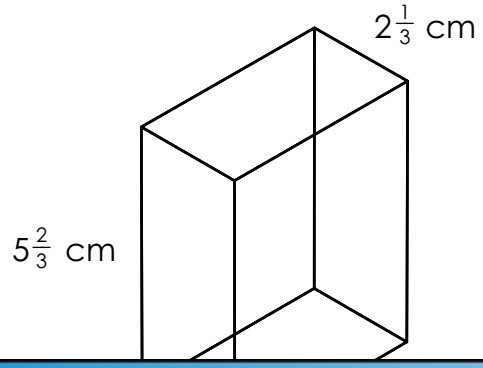
How many $\frac{1}{2}$–cm cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

9. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{3}$–cm cubes fit in the prism?



10. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of $1\frac{1}{2}$ km, a width of 1 km, and a height of $\frac{1}{4}$ km.

Fill in the rectangular prism volume formula using improper fractions.

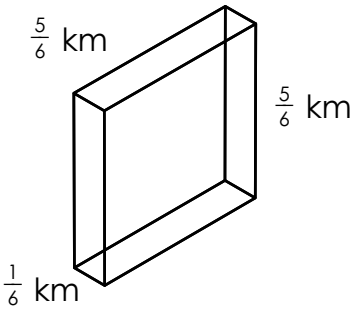
l = 9 mm

w = $7\frac{1}{2}$ mm

h = 10 mm

Remember to include the units in your answer.

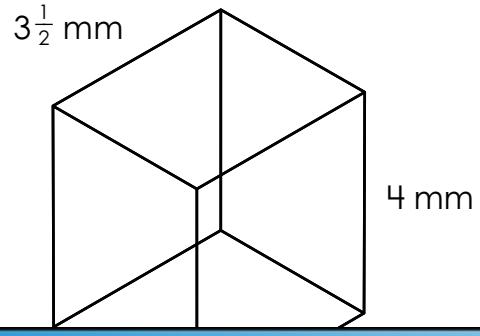
How many $\frac{1}{6}$–km cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

13. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{2}$–mm cubes fit in the prism?



Fill in the rectangular prism volume formula using improper fractions.

$$l = 4\frac{1}{2} \text{ cm}$$

$$w = 5\frac{1}{2} \text{ cm}$$

$$h = 6\frac{1}{2} \text{ cm}$$

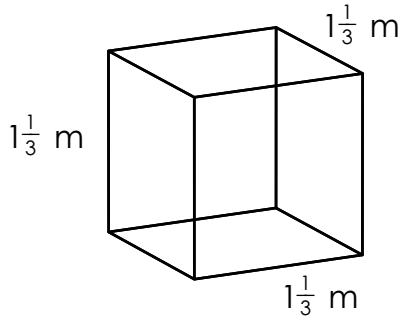
Remember to include the units in your answer.

14. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of 2 m, a width of $1\frac{2}{3}$ m, and a height of $\frac{2}{3}$ m.

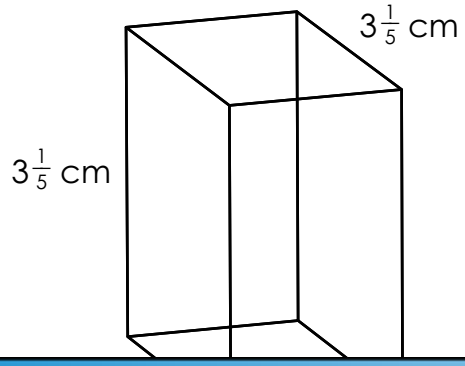
How many $\frac{1}{3}$–m cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

17. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{5}$–cm cubes fit in the prism?



Fill in the rectangular prism volume formula using improper fractions.

$$l = 2\frac{1}{5} \text{ m}$$
$$w = 1\frac{2}{5} \text{ m}$$
$$h = \frac{3}{5} \text{ m}$$

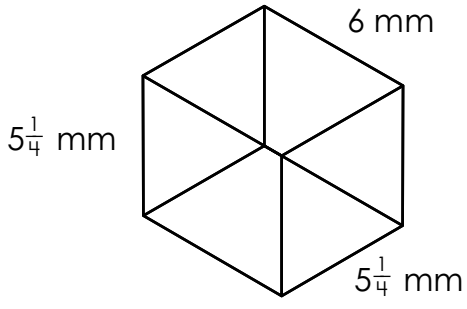
Remember to include the units in your answer.

18. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of $\frac{2}{3}$ m, a width of $\frac{2}{3}$ m, and a height of $\frac{2}{3}$ m.

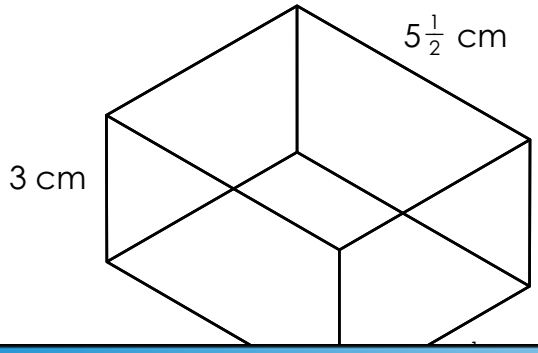
How many $\frac{1}{4}$–mm cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

21. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{2}$–cm cubes fit in the prism?



Fill in the rectangular prism volume formula using improper fractions.

$$l = 2 \text{ cm}$$

$$w = 2\frac{1}{2} \text{ cm}$$

$$h = 1\frac{5}{6} \text{ cm}$$

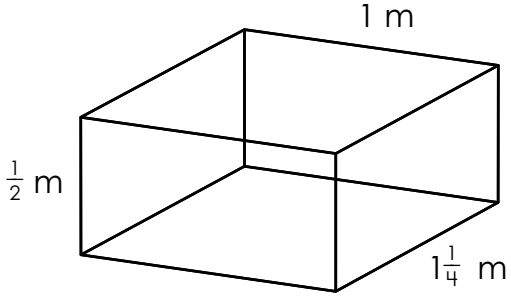
Remember to include the units in your answer.

22. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of $\frac{2}{5}$ km, a width of $\frac{2}{5}$ km, and a height of $\frac{1}{5}$ km.

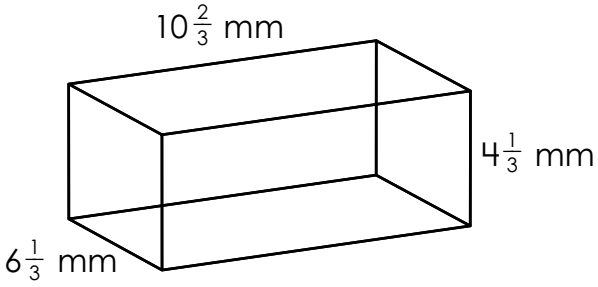
How many $\frac{1}{4}$–m cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

25. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{3}$–mm cubes fit in the prism?



26. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of 7 m, a width of 5 m, and a height of $6\frac{1}{2}$ m.

Fill in the rectangular prism volume formula using improper fractions.

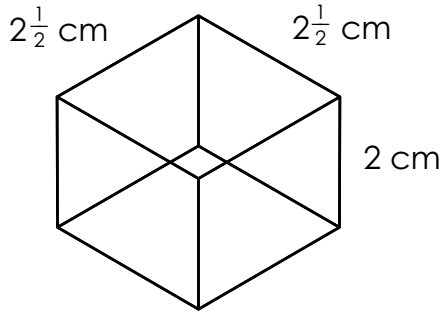
$l = \frac{3}{4}$ m

$w = 2\frac{1}{2}$ m

$h = 2\frac{1}{4}$ m

Remember to include the units in your answer.

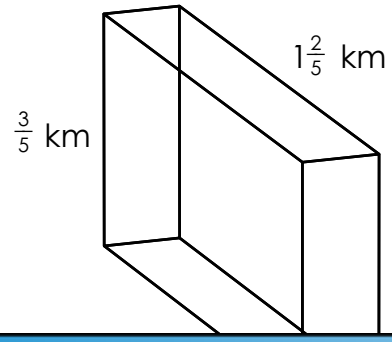
How many $\frac{1}{2}$–cm cubes fit in the prism? What is the prism's total volume?



Remember to include the units in your answer.

29. Rectangular Prisms with Fractional Edge Lengths

How many $\frac{1}{5}$–km cubes fit in the prism?



30. Rectangular Prisms with Fractional Edge Lengths

What is the volume?

A rectangular prism has a length of $12\frac{1}{2}$ mm, a width of 10 mm, and a height of $8\frac{1}{2}$.

Name: _____

Task Cards: Rectangular Prisms with Fractional Edge Lengths

Note: Simplify the volumes when possible.

1. _____ $\frac{1}{2}$**–m cubes**

2. _____

3. _____ × _____ × _____ = _____

4. _____ $\frac{1}{5}$**–cm cubes** v = _____

9. _____ $\frac{1}{3}$**–cm cubes**

10. _____

11. _____ × _____ × _____ = _____

12. _____ $\frac{1}{6}$**–km cubes** v = _____

13. _____ $\frac{1}{2}$**–mm cubes**

14. _____

15. _____ × _____ × _____ = _____

Name: _____

Task Cards: Rectangular Prisms with Fractional Edge Lengths

16. _____ $\frac{1}{3}$–m cubes v = _____

17. _____ $\frac{1}{5}$–cm cubes

18. _____

19. _____ × _____ × _____ = _____

24. _____ $\frac{1}{2}$–m cubes v = _____

25. _____ $\frac{1}{3}$–mm cubes

26. _____

27. _____ × _____ × _____ = _____

28. _____ $\frac{1}{2}$–cm cubes v = _____

29. _____ $\frac{1}{5}$–km cubes

30. _____

ANSWER KEY

Task Cards: Rectangular Prisms with Fractional Edge Lengths

Note: Simplify the volumes when possible.

1. 210 $\frac{1}{2}$-m cubes

2. $\frac{189}{64}$ m^3 or $2\frac{61}{64}$ m^3

13. 336 $\frac{1}{2}$-mm cubes

14. $\frac{20}{9}$ m^3 or $2\frac{2}{9}$ m^3

15. $\frac{9}{2}$ × $\frac{11}{2}$ × $\frac{13}{2}$ = $\frac{1,287}{2}$ cm^3 or $643\frac{1}{2}$ cm^3

ANSWER KEY

Task Cards: Rectangular Prisms with Fractional Edge Lengths

16. 64 $\frac{1}{3}$-m cubes $v = \frac{64}{27}\ m^3$

17. 2,304 $\frac{1}{5}$-cm cubes

$\frac{11}{6}$

$\frac{9}{4}$

28. ____ $\frac{1}{2}$-cm cubes $v =$ ____

29. 21 $\frac{1}{5}$-km cubes

30. $\frac{2,125}{2}\ mm^3$ or $1,062\frac{1}{2}\ mm^3$

TL