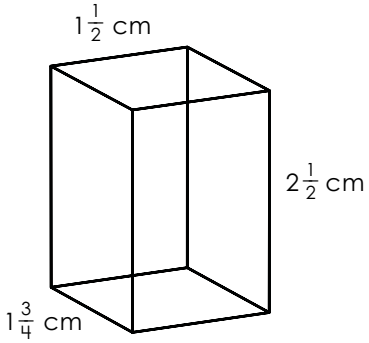
Name: _____

Volume of a Rectangular Prism



To find the exact volume of a rectangular prism with fractional edge lengths, convert the dimensions into improper fractions. Then multiply the length by the width by the height.

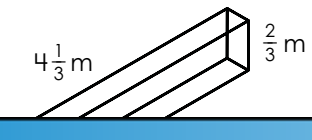
$V = l \times w \times h$

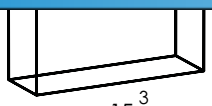
$V = \frac{3}{2} \times \frac{7}{4} \times \frac{9}{4}$

$V = \frac{189}{32}\text{ cm}^3 = 5\frac{29}{32}\text{ cm}^3$

Calculate the volume of each rectangular prism. Be sure to include units in your answer.

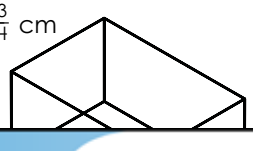
a.

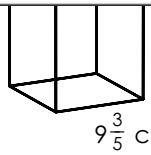




$V =$ _____

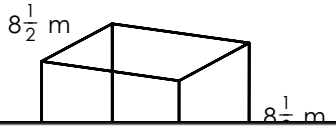
b.

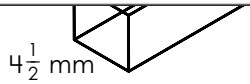




$V =$ _____

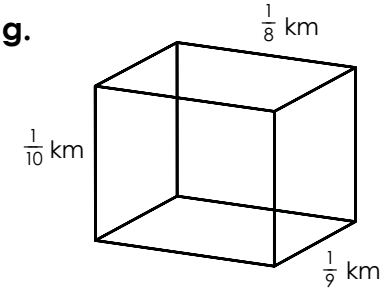
c.





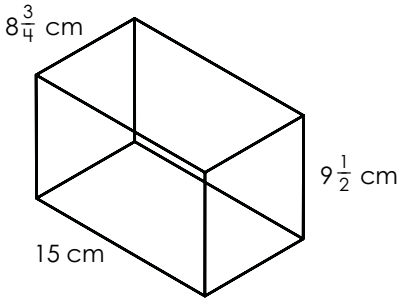
$V =$ _____

g.



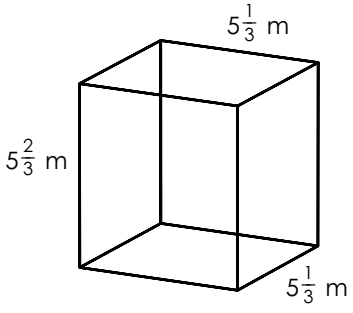
$V =$ _____

h.



$V =$ _____

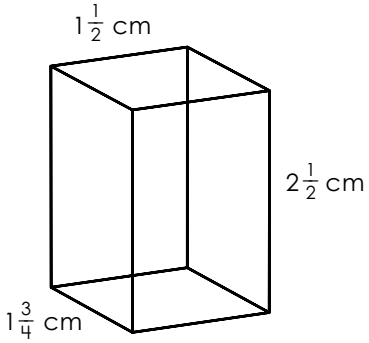
i.



$V =$ _____

ANSWER KEY

Volume of a Rectangular Prism



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$$V = \frac{189}{32}\text{ cm}^3 = 5\frac{29}{32}\text{ cm}^3$$

$V =$ 720 [illegible] $V =$ 8 [illegible] 8 $V =$ 27 [illegible] 27