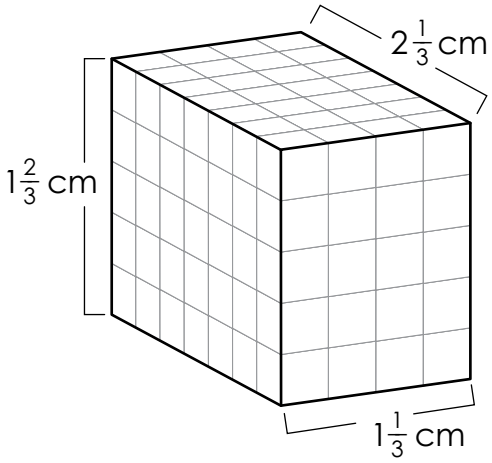
Name: _____

Volume of Rectangular Prisms

Unit Cubes



To find how many fractional unit cubes fit in the rectangular prism, express the dimensions in terms of total fractional units. Then multiply.

***Note:** If applicable, convert to the common denominator first.*

$4 \times 5 \times 7 = 140$ $\frac{1}{3}$–cm cubes fit

To find the volume, first determine how many fractional unit cubes fit inside a whole unit cube by cubing the common denominator.

$3 \times 3 \times 3 = 27$ $\frac{1}{3}$–cm cubes fit inside 1 1–cm cube

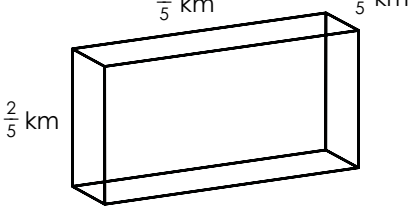
Multiply the number of $\frac{1}{3}$–cm cubes by $\frac{1}{27}$ cm^3 per cube.

$140 \times \frac{1}{27} = 5\frac{5}{27}$ cm^3

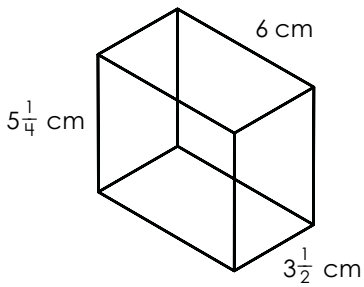
total $\frac{1}{2}$–cm cubes: _____ **total $\frac{1}{3}$–m cubes:** _____ **total $\frac{1}{4}$–m cubes:** _____

total volume: _____ **total volume:** _____ **total volume:** _____

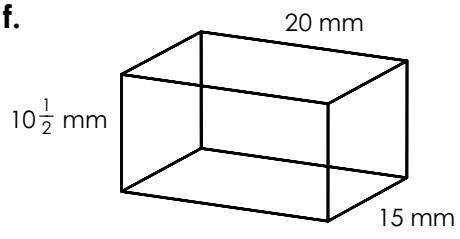
d.



e.



f.



total $\frac{1}{5}$–mm cubes: _____ **total $\frac{1}{4}$–cm cubes:** _____ **total $\frac{1}{2}$–mm cubes:** _____

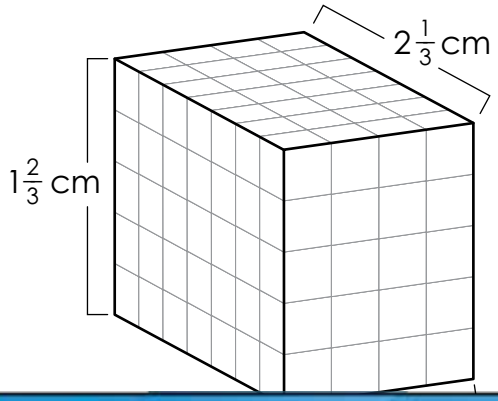
total volume: _____ **total volume:** _____ **total volume:** _____

Name:

ANSWER KEY

Volume of Rectangular Prisms

Unit Cubes



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Preview

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