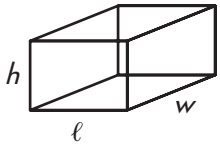
NAME _____

Lesson 5.11 Volume: Rectangular Prisms

Volume is the amount of space a solid (three-dimensional) figure occupies. You can calculate the volume of a rectangular solid by multiplying the area of its base by its height: $V = Bh$.



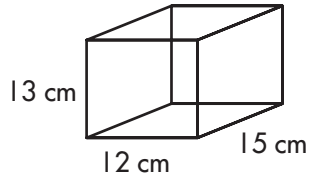
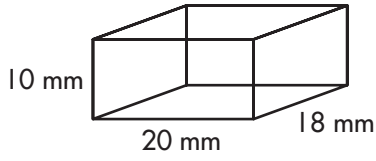
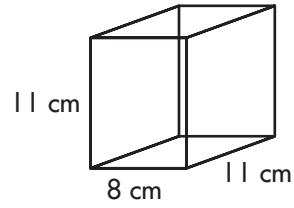
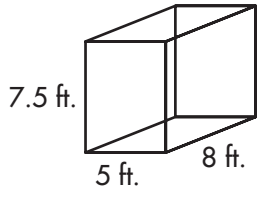
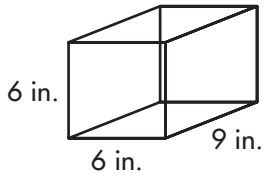
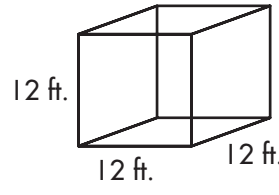
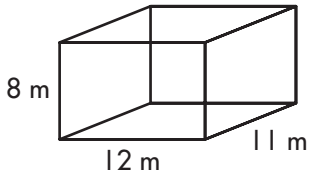
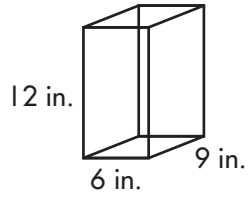
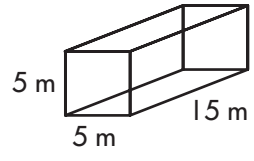
The area of the base is found by multiplying length and width. $B = \ell \times w$, so the volume can be found by using the formula $V = \ell \times w \times h$.

If $\ell = 10$ m, $w = 11$ m, and $h = 7$ m, what is the volume of the solid?

$V = 10 \times 11 \times 7$ $V = 770$ m^3 or 770 cubic meters.

Because the measure is in 3 dimensions, it is measured in **cubic units** or **units^3**.

Find the volume of each rectangular solid.

	a	b	c
1.			
	$V =$ _____ cm^3	$V =$ _____ mm^3	$V =$ _____ cm^3
2.			
	$V =$ _____ ft.^{3}	$V =$ _____ in.^{3}	$V =$ _____ ft.^{3}
3.			
	$V =$ _____ m^3	$V =$ _____ in.^{3}	$V =$ _____ m^3