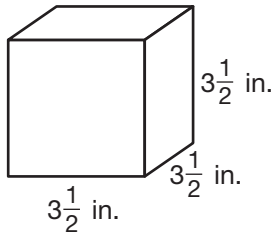
Name _____

Practice
18-4

Volume with Fractional Edge Lengths

Find the volume of each rectangular prism.

1.



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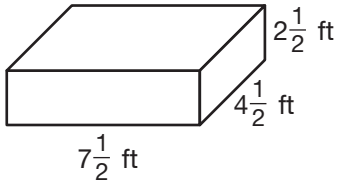
2.



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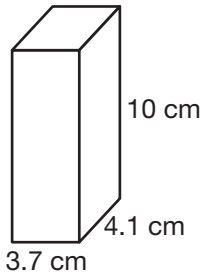
3.



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Find the missing value for each rectangular prism.

4. Volume: $111\frac{3}{8}$ in^3
Base: $20\frac{1}{4}$ in^2
Height: _____

5. Volume: $8\frac{2}{3}$ ft^3
Length: _____
Width: $4\frac{1}{3}$ ft
Height: $\frac{2}{3}$ ft

6. Volume: 758.16 mm^3
Length: 13 mm
Width: _____
Height: 7.2 mm

7. Number Sense A rectangular prism can be filled with 210 half-inch cubes. How many $\frac{1}{4}$-inch cubes would it take to fill the same prism?

_____

8. A rectangular prism has a base with an area of 31.5 cm^2 and a height of 4.7 cm. What is the volume of the prism?

A 36.2 cm^3 **C** 148.05 cm^3

B 72.4 cm^3 **D** 296.1 cm^3

9. Writing to Explain Find and compare the volumes of the two rectangular prisms below. How does dividing each dimension of the larger prism by 2 affect the volume of the smaller prism?

Length	Width	Height	Volume
5 in.	$4\frac{1}{2}$ in.	6 in.	
$2\frac{1}{2}$ in.	$2\frac{1}{4}$ in.	3 in.	

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Practice **18-4**