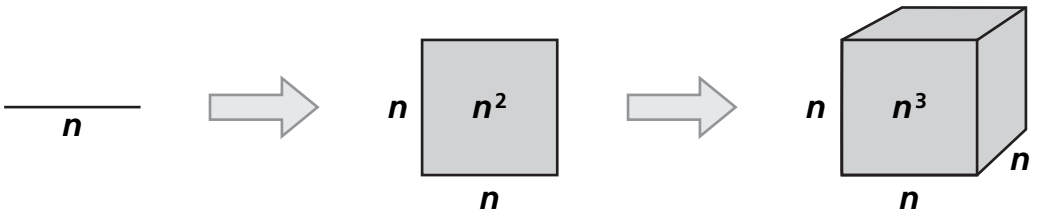
Name _____ Date _____

Extension
Lesson 4

Volume of Rectangular Prisms

You already know that a certain length, *n*, may represent the length of a line segment, the side of a square, and the edge of a cube.



Length: *n* **Area: n^2** **Volume: n^3**

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1 Complete the table using positive numbers only.

n	1									
n^2		36	25	81		16	64		49	
n^3					8			27		1000

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2 The symbol $\sqrt{}$ means "square root."

If n is not a negative number, then $\sqrt{n^2} = n$.
Write the square roots.

$\sqrt{25}$ = _____ $\sqrt{64}$ = _____ $\sqrt{100}$ = _____

$\sqrt{144}$ = _____ $\sqrt{225}$ = _____ $\sqrt{625}$ = _____

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3 The symbol $\sqrt[3]{}$ means "cube root." $\sqrt[3]{n^3} = n$.
Write the cube roots.

$\sqrt[3]{64}$ = _____ $\sqrt[3]{216}$ = _____ $\sqrt[3]{27}$ = _____

$\sqrt[3]{512}$ = _____ $\sqrt[3]{1000}$ = _____ $\sqrt[3]{729}$ = _____