

Perfect Squares

When you're doing math -- especially in Algebra, you'll want to be able to know some important exponents by memory!

$1^2 = \underline{\hspace{2cm}}$ $7^2 = \underline{\hspace{2cm}}$ $13^2 = \underline{\hspace{2cm}}$

$2^2 = \underline{\hspace{2cm}}$ $8^2 = \underline{\hspace{2cm}}$ $14^2 = \underline{\hspace{2cm}}$

$3^2 = \underline{\hspace{2cm}}$ $9^2 = \underline{\hspace{2cm}}$ $15^2 = \underline{\hspace{2cm}}$

$4^2 = \underline{\hspace{2cm}}$ $10^2 = \underline{\hspace{2cm}}$ $16^2 = \underline{\hspace{2cm}}$

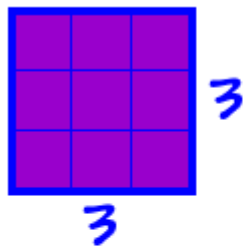
$5^2 = \underline{\hspace{2cm}}$ $11^2 = \underline{\hspace{2cm}}$ $17^2 = \underline{\hspace{2cm}}$

$6^2 = \underline{\hspace{2cm}}$ $12^2 = \underline{\hspace{2cm}}$ $18^2 = \underline{\hspace{2cm}}$

Some of these are from your times tables... So, you should already know them!

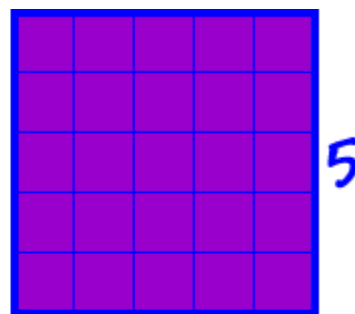
Why are they called "perfect squares" (or just "squares")?

Because they are the area of a **square**!



area:

$3^2 = 9$



area:

$5^2 = 25$

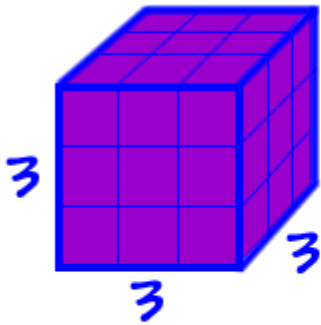
Perfect Cubes

$$1^3 = \underline{\quad} \quad 2^3 = \underline{\quad} \quad 3^3 = \underline{\quad}$$

$$4^3 = \underline{\quad} \quad 5^3 = \underline{\quad}$$

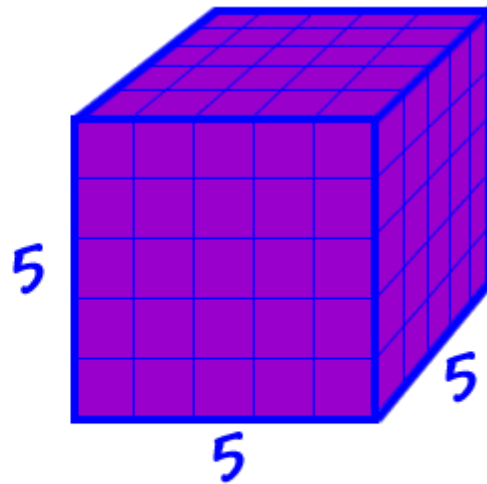
I'll bet you can guess why these are called "cubes!"

Yep, they are the volumes of **cubes**!



volume:

$$3^3 = 27$$



volume:

$$5^3 = 125$$