### 1.3 POWERS AND SQUARE ROOTS


$4^{3}$ is read four to the third power.
$5^{2}$ is read 5 to the $\qquad$ power or 5 $\qquad$ .
$6^{3}$ is read 6 to the $\qquad$ power or 6 $\qquad$ .
$4^{1}$ Any number to the first power is $\qquad$ .
$3^{0}$ Any number to the zero power is $\qquad$ .
$10^{7}$ Any base ten number has the same number of zeros as the $\qquad$

WHAT IT MEANS:
$5^{3}=5 \times 5 \times 5$
$9^{2}=9 \times 9$
$2^{8}=2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

## Try these:

$7^{0}=$
$3^{?}=1$
$6^{2}=$
$4^{?}=4$
$8^{1}=$
$10^{?}=10,000$
$10 \times 10 \times 10 \times 10=$
$7 \times 7 \times 7=$

STOP! Let's do together....
$(-2)^{3}=$
$(-4)^{2}=$
$-(4)^{2}=$
$(1 / 2)^{3}=$
$1 / 4^{2}=$
$(-3)^{3}=$
$-(-5)^{2}=$

## SQUARE ROOTS

$\sqrt{25}=$
$\sqrt{64}=$
$\sqrt{100}=$
$\sqrt{4}=$

Estimate $\sqrt{17}$

You want to put a fence around a garden that is 121 square feet. How many feet will the fence be?


