Definition of a square root.

5 is a square root of 25 because $5^2 = 25$

2 is a square root of 4 because $2^2 = 4$

$b$ is a square root of $a$ if $b^2 = a$

Identify the square roots of 64, 16, 1, -100

$\sqrt{16}$ represents the **POSITIVE** square root or the principal root.

For $a \in \mathbb{R}$ and $a > 0$

1) $\sqrt{a}$ is the **positive** square root of $a$.

2) $-\sqrt{a}$ is the **negative** square root of $a$.

3) $\sqrt{0} = 0$

S.P. Simplify $\sqrt{81}$, $\sqrt{\frac{36}{49}}$, $\sqrt{0.09}$

Simplify $-\sqrt{64}$, $\sqrt{81}$, $\sqrt{\frac{1}{4}}$, $-\sqrt{0.25}$