

Perfect Squares

$$1^2 = 1.$$

$$2^2 = 4.$$

$$3^2 = 9.$$

$$4^2 = 16.$$

$$5^2 = 25.$$

$$6^2 = 36.$$

$$7^2 = 49.$$

$$8^2 = 64.$$

$$9^2 = 81.$$

$$10^2 = 100.$$

* MEMORIZE *

⊗ Simplify Square Root :

divide by the largest perfect square that is a factor of the #. (That divides into the # with no remainder)

$$\begin{aligned} \text{Ex: } \sqrt{18} &= \sqrt{9 \cdot 2} \\ &= \boxed{3\sqrt{2}} \end{aligned}$$

$$\begin{aligned} \sqrt{20} &= \sqrt{4 \cdot 5} \\ &= \boxed{2\sqrt{5}} \end{aligned}$$

Ex:

$$\sqrt{27} = \sqrt{9} \sqrt{3}$$

↳ = $\boxed{3\sqrt{3}}$

$$\sqrt{200} = \sqrt{100} \sqrt{2}$$

↳ = $\boxed{10\sqrt{2}}$

$$\sqrt{50} = \sqrt{25} \sqrt{2}$$

↳ = $\boxed{5\sqrt{2}}$

$$\sqrt{24} = \sqrt{4} \sqrt{6}$$

= $\boxed{2\sqrt{6}}$

$$\sqrt{48} = \sqrt{16} \sqrt{3}$$

↳ = $\boxed{4\sqrt{3}}$