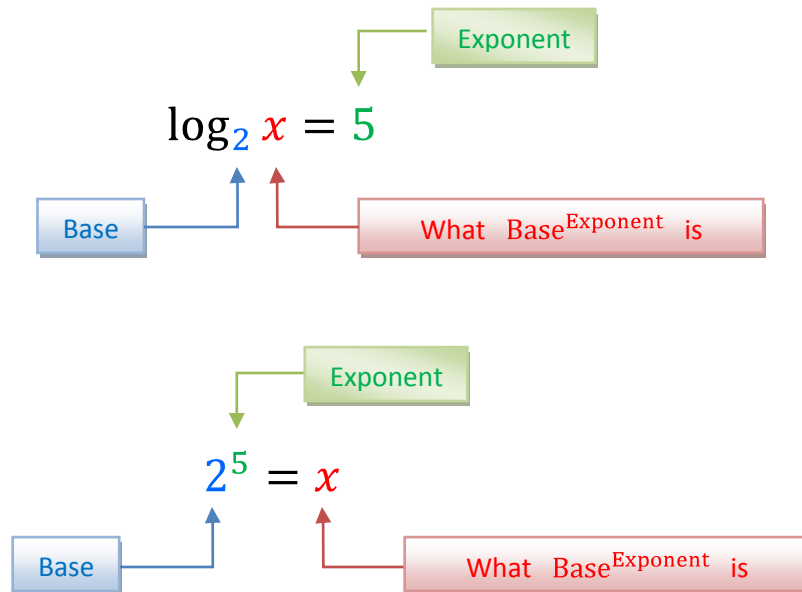


$$\text{Solve for } x: \log_2 x = 5$$

Step 1 – Rearrange the three parts of the logarithmic equation to turn it into an exponential equation.



Step 2 – Solve for  $x$ .

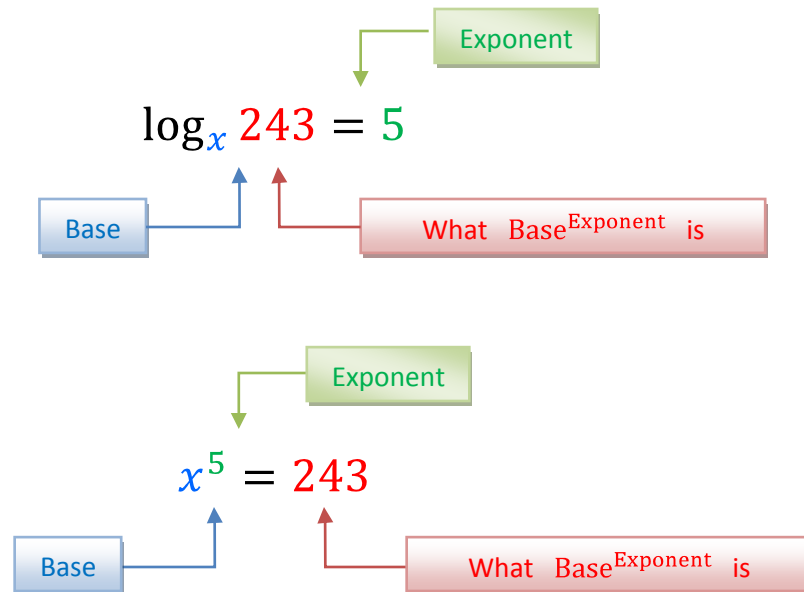
$$2^5 = x$$

$$32 = x$$

$$\boxed{x = 32}$$

$$\text{Solve for } x: \log_x 243 = 5$$

Step 1 – Rearrange the three parts of the logarithmic equation to turn it into an exponential equation.



Step 2 – Solve for  $x$ .

$$x^5 = 243$$

$$\sqrt[5]{x^5} = \sqrt[5]{243}$$

$$x = 3$$

$$\mathbf{x = 3}$$