

## Answer on Question #81722 – Math – Algebra

### Question

Laws of indices

### Solution

1-st Law:  $a^n * a^m = a^{n+m}$ .

2-nd Law:  $\frac{a^n}{a^m} = a^{n-m}$ .

3-rd Law:  $(a^m)^n = a^{mn}$ .

4-th Law:  $a^0 = 1, (a \neq 0)$ .

5-th Law:  $a^{-m} = \frac{1}{a^m}$ .

6-th Law:  $a^{\frac{n}{m}} = \sqrt[m]{a^n}$ .