

First Rule:  $a^m \times a^n = a^{m+n}$

Second Rule:  $a^m \div a^n = a^{m-n}$

Third Rule:  $(a^m)^n = a^{mn}$

Fourth Rule:  $a^m \times b^m = (ab)^m$

Fifth Rule:  $a^m \div b^m = \left(\frac{a}{b}\right)^m$