

Curriculum Outcome

(N1) Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents by: representing repeated multiplication using powers; using patterns to show that a power with an exponent of zero is equal to one; solving problems involving powers.

(N2) Demonstrate an understanding of operations on powers with integral bases (excluding base 0) and whole number exponents.

Student Friendly:

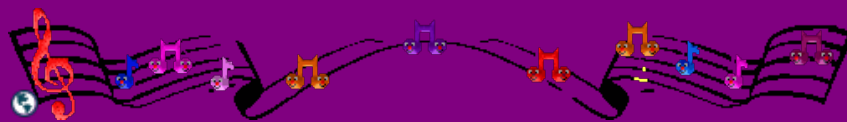
"Learning the laws of Exponents "

Simplifying expressions before we try to evaluate them.



Quiz Time

Exponent Laws



Class/Homework

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4def, 5abc, 6, 7, 8ab, 9,

10,

14,

15

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Laws:

$$1) x^0 = 1$$

$$2) (x^a)(x^b) = x^{a+b}$$

$$3) (x^a) \div (x^b) = x^{a-b}$$

$$4) (x^a)^b = x^{(a)(b)}$$

$$5) \left(\frac{x^a}{y^a}\right)^b = \frac{x^{ab}}{y^{ab}}$$