Group 1

Exponential functions

• Presentation: Rules for exponents; rational and irrational exponents

• Hands-on exercise: Simplify the exponential expressions

Exponential functions

Are mathematical function on the form f(x)=a.b^2, where a and b are constants, and b is the base of the exponential function .The exponent x is a variable ,and the function represent repeated multiplication of the base b by itself ,x time

Rules for exponents

Product rule;

when you multiply two powers with powers with the same base, you can add their exponents

Quotient rule;

when you divide two powers with the same base you subtract their exponents

PowerRule;

(a^m)^n=a^m\*n when you raise a power to another exponent, you can multiply their exponents

Negative exponent

a^-n =1/a^n-A negative exponent indicates the reciprocal of the base raised to the positive exponent

Zero exponent rule a^0=1 any number raised to the power of zero equals, excepts when the the base raised to the positive exponents