

**Product of Powers** 

$$x^{a+b}$$

Power with a sum as an exponent

2.1

2.2

$$(x^a)^b$$

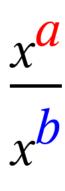
Power of a Power



Power with a product as an exponent

2.3

2.4



## **Quotient of Powers**

 $x^{a-b}$ 

Power with a difference as an exponent

2.5

2.6



Power with Negative Exponent

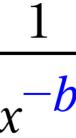
1

 $\chi^{a}$ 

Rational Expression with power in denominator

2.7

2.8



Rational Expression with power in denominator with a negative exponent

 $x^{b}$ 

Power

2.10

2.9

 $\frac{a}{b}$ 

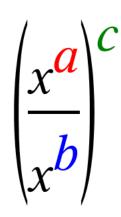
Power with rational exponent

 $\frac{b}{\sqrt{x^a}}$ 

Radical Expression with power in the radicand

2.11

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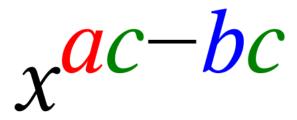
Power of a Quotient of Powers

 $\frac{x^{ac}}{x^{bc}}$ 

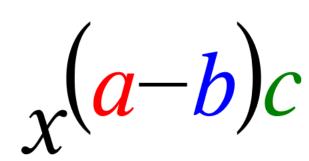
**Quotient of Powers** 

2.13

2.14



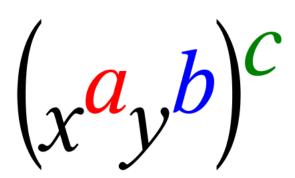
Power with a difference as an exponent



Power with a product involving a difference as an exponent

2.15

2.16



Power of a Product of Powers



**Product of Powers** 

2.18

2.17

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