

Student Facing

Unit 5 Lesson 2: Multiplication and Division

Lesson Objective:

By the end of class, I will be able to

Definition

Base	
Exponent	

Key Concepts:

Product Rule	Quotient Rule
$m^a * m^b = m^a(m^b) = m^a m^b$	$m^a \div m^b = \frac{m^a}{m^b} =$

Examples:

$x^3 * x^4$	$\frac{y^5}{y^2}$
$3b^2 * 4b^8$	$\frac{16n^{12}}{32n^9}$
$3x^3 y(2x^4 y^7)$	$\frac{64a^3 b^5}{8ab}$
$2^5 b^2 c(1^3 b^6 c^2)$	$\frac{m^{13}}{m^5} + m^3 m^5$

Practice Problems:

Show work for the following problems. Determine what exponent will make the expression true. Type your answer in the answer box and click ENTER on the assignment in googleClassroom. Correct answers will turn BLACK and the picture will begin to appear. Incorrect answers will show in RED, with no change to the picture. Enter a negative number if the exponent should be negative to make the expression true.

#	QUESTION			
1	$x^3 \cdot x^6 = x^{\square}$			
2	$b^{18} \cdot b^{-5} = b^{\square}$			
3	$m \cdot m^7 = m^{\square}$			
4	$u^5 \cdot u^6 \cdot u^9 = u^{\square}$			
5	$r^2 \cdot r \cdot r^{-1} = r^{\square}$			
6	$k^3 \cdot k^{-10} = k^{\square}$			
7	$y^9 \cdot y^{-8} = y^{\square}$			
8	$\frac{w^{14}}{w^4} = w^{\square}$			
9	$\frac{a^{12}}{a} = a^{\square}$			
10	$\frac{g^7}{g^{11}} = g^{\square}$			
11	$\frac{n^{15} \cdot n^3}{n^2} = n^{\square}$			
12	$\frac{p^{16}}{r \cdot p^{12}} = n^{\square}$			
13	$\frac{v^4 \cdot v^6}{r^{-7} \cdot v^8} = v^{\square}$			

Teacher Facing

Materials

Slides

[Extra practice](#)

Exit ticket