

Day	Title	Pg
6	NOTES 1.3 • / ÷ Monomial	19

Multiplying Same base exponents $\rightarrow = X^3 \cdot X^5 = \overbrace{X \cdot X \cdot X}^3 \cdot \overbrace{X \cdot X \cdot X \cdot X \cdot X}^5$
 $X^{3+5} = X^8$
 • Add Exponents of Same base
 • multiply Coefficients

$$\rightarrow 3x^4 \cdot (-5x^3) = 3 \cdot (-5) \cdot \overbrace{x \cdot x \cdot x \cdot x}^4 \cdot \overbrace{x \cdot x \cdot x}^3$$

$$3 \cdot (-5) x^{4+3} = -15 x^7$$

Dividing Same base Exponents
 • Subtract exponents (which has more top or bottom)
 • Divide/Reduce Fraction Normally (coefficient)

$$\rightarrow \frac{x^6}{x^2} = \frac{\overbrace{x \cdot x \cdot x \cdot x \cdot x \cdot x}^6}{\overbrace{x \cdot x}^2} = x^4$$

$$x^{6-2} = x^4$$

"Top has more by 4"

$$\rightarrow \frac{5x^3}{10x^2} = \frac{5 \cdot \overbrace{x \cdot x \cdot x}^3}{10 \cdot \overbrace{x \cdot x}^2} = \frac{1x}{2}$$

$$\frac{5}{10} x^{3-2} = \frac{x}{2}$$

* 1.3
 Got it? a-i
 TB pg 24