

Algebra I

5-2

Dividing Monomials

Simplify. (pg 192)

$$1) \frac{42}{63} = \frac{2 \cdot 3 \cdot 7}{3 \cdot 3 \cdot 7} = \frac{2}{3}$$

$$3) \frac{10^4}{10^6} = \frac{1}{10^2}$$

when dividing, subtract powers.

$$11) \frac{12x^3}{4xy^2} = \frac{3x^2}{y}$$

$$21) \frac{(2r)^4}{2r^4} = \frac{16r^4}{2r^4} = 8$$

Find the missing factor.

$$31) 6t^4 = (2t)(?)$$

$3t^3$

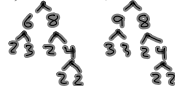
$$39) (3a^3b^2)^3 = (3a^3b^2)^2(?)$$

$$27a^6b^6 = 9a^6b^4(?)$$

$3a^2b^2$

Find the GCF (and LCM) of each pair of monomials.

$$47) 48a^2bc^3, 72ab^3c^2$$



$$2^4 \cdot 3 \cdot a^2 \cdot b \cdot c^3 \quad 2^3 \cdot 3^2 \cdot a \cdot b^3 \cdot c^2$$

$$\text{GCF: } 2^3 \cdot 3 \cdot a \cdot b \cdot c^2 = 24abc^2$$

$$\text{LCM: } 2^4 \cdot 3^2 \cdot a^2 \cdot b^3 \cdot c^3 = 144a^2b^3c^3$$

Pg 192
2-52 even