Product Rule

am . an = am+n

(22)(23)(20)

**25**

x4(x2)

**x6**

n(n2)

**n3**

(-9y2)(y5)

**-9y7**

(6n4)(2n4)

**12n8**

(5ab)(a2b)

**5a3b2**

(r2s3t4)(r5st3)

**r7s4t7**

3m5 . 5m7

**15m12**

4x2 . 2xy3

**8x3y3**

(-3)5 . 23 . (-3)7 . 25

**(-3)12 . 28**

5b4c-2 . 6b-3c

**30bc-1**

43 . 52 . 4-9 . 5-3

**4-6 . 5-1**

3p2r-2 . 4p-3r-5

**12p-1r-7**

(5b-3)(8b-5)

**40b-8**

(2e7)(3e-5)(4e-5)

**24e-3**

3c-2d7 . 2c5d-10

**6c3d-3**

Quotient Rule

am ÷ an = am-n

$$\frac{x^{12}}{x^{4}}$$

**x8**

$$\frac{3^{6}}{3^{4}}$$

**32**

$$\frac{2^{5}}{2^{9}}$$

**2-4**

$$\frac{7^{4}}{7^{-3}}$$

**77**

$$\frac{7^{10}}{7^{3}}$$

**77**

$$\frac{c^{9}}{c^{4}}$$

**c5**

$$6^{5}÷6^{3}$$

**62**

$$8^{9}÷8^{3}$$

**86**

$$5^{3}÷5^{-1}$$

**54**

$$2^{4}÷2^{-2}$$

**26**

$$\frac{a^{2}}{a}$$

**a**

$$\frac{6c}{2}$$

**3c**

$$\frac{-5ax}{a}$$

**-5x**

$$\frac{x^{4}}{x^{3}}$$

**x**

$$\frac{3n^{4}}{3n^{3}}$$

**n**

$$\frac{3m^{-4}}{m^{3}}$$

**3m-7**

$$\frac{15x^{5}}{3x^{-3}}$$

**5x8**

$$\frac{-56x^{4}}{8x^{2}}$$

**-7x2**

$$\frac{48bc^{2}}{8c^{2}}$$

**6b**

$$\frac{50m^{3}n^{2}}{2m^{2}n}$$

**25mn**

$$\frac{12x^{2}y^{6}}{xy^{4}}$$

**12xy2**

$$\frac{16ab^{4}}{2a^{2}b^{3}}$$

**8a-1b**