How could we solve (two ways)

a. $2^x \cdot 2^3 = 2^7$?

$$2^{x+3} = 2^7$$

$$\frac{300}{10} = 30$$

$$\frac{30 \cdot \cancel{10}^{1}}{\cancel{10}_{1}} = 30$$

$$x + 3 = 7$$
$$-3 \quad -3$$
$$x = 4$$

$$\frac{2^x \cdot \cancel{8}}{\cancel{8}} = \frac{128}{8}$$

$$2^x = 16$$
$$2^4 = 16$$
$$x = 4$$

b. $2^x \cdot 2^4 = 2^6$

$$\underline{2}^{x+4} = \underline{2}^6$$

$$x + 4 = 6$$
$$-4 \quad -4$$
$$x = 2$$

Simplify.

p. 374
(19 – 47) odd

a. $(-2c^2)(3c^3)$

$-2 \cdot c^2 \cdot 3 \cdot c^3$

$(-2 \cdot 3)(c^2 \cdot c^3)$

$-6c^5$

b. $(5t^1)(-30t^2)$

$t \cdot t^2 = t \cdot tt$

$5(-30)\, t^{1+2}$

$-150t^3$

c. $(8xy)(-10y)(-2yz^2)$

$8 \cdot 10 \cdot 2\, x^1 y^1 y^1 y^1 z^2$

$= 160xy^3z^2$

even # $\ominus \rightarrow +$
odd # $\ominus \rightarrow -$

d. $(+3a^2b)(-5ab^2c^3)(4a^3b^2c)$

$-60\, a^2 a^1 a^3\, b^1 b^2 b^2\, c^3 c^1$

$-60a^6b^5c^4$