

Warm up:

Simplify.

$$1) 2x^3 \cdot 5x^4 = 10x^7$$

$$2) 4y^{12} \cdot 10y^5 = 40y^{17}$$

$$3) \underline{3}x^7 \underline{y}^9 \cdot \underline{15}x^{-4} \underline{y}^2 = \underline{45}x^3 \underline{y}^{11}$$

$$(2 \times 10^4)(3 \times 10^7)$$

$$6 \times 10^{11}$$

$$2a^4 \cdot 3a^7 = 6a^{11}$$

$$(2 \times 10^8)(4 \times 10^4)$$

$$8 \times 10^{12}$$

$$(3 \times 10^{13})(3 \times 10^{-5})$$

$$9 \times 10^8$$

$$(3 \times 10^5)(4 \times 10^4)$$

$$12 \times 10^9$$

$$1.2 \times 10^{10}$$

$$12 \times 10^9 = 12,000,000,000$$

$$152 \times 10^6$$

$$1.52 \times 10^8$$

$$0.05 \times 10^7 = 5 \times 10^5$$

$$1) (1.4 \times 10^5)(4 \times 10^{11}) = 5.6 \times 10^{16}$$

$$2) (5 \times 10^3)(4 \times 10^6) = 20 \times 10^9 = 2 \times 10^{10}$$

$$3) (1.2 \times 10^7)(3.4 \times 10^8) = 4.08 \times 10^{15}$$

$$4) (3 \times 10^4)(5 \times 10^6) = 15 \times 10^{10} = 1.5 \times 10^{11}$$

$$5) (9.1 \times 10^6)(3 \times 10^9) = 27.3 \times 10^{15} = 2.73 \times 10^{16}$$

$$6) (4 \times 10^5)(7 \times 10^8) = 28 \times 10^{13} = 2.8 \times 10^{14}$$

HW Solutions

⑨

0.006008

$$6.008 \times 10^{-3}$$

⑤ 6.2×10^{-8}

.000000062

0.000000062

$$\frac{12x^7}{2x^3} = 6x^4$$

$$\frac{4 \times 10^9}{2 \times 10^5} = 2 \times 10^4$$

$$\frac{6 \times 10^{12}}{3 \times 10^2} = 2 \times 10^{10}$$

$12 + (-2)$

$$\frac{8 \times 10^{12}}{2 \times 10^{-3}} = 4 \times 10^{15}$$

$$1) \frac{9 \times 10^{13}}{4.5 \times 10^7}$$

$$4) \frac{6.6 \times 10^{-7}}{1.1 \times 10^{-9}}$$

$$2) \frac{5 \times 10^6}{5 \times 10^{-4}}$$

$$5) \frac{1 \times 10^{15}}{8 \times 10^{20}}$$

$$3) \frac{1.7 \times 10^{11}}{3.4 \times 10^3}$$

$$6) \frac{1.6 \times 10^2}{4 \times 10^{-17}}$$

$$1) \frac{9 \times 10^{13}}{4.5 \times 10^7} = 2 \times 10^6$$

$$2) \frac{5 \times 10^6}{5 \times 10^{-4}} = 1 \times 10^{10}$$

$$3) \frac{1.7 \times 10^{11}}{3.4 \times 10^3} = 0.5 \times 10^8$$

5×10^7

$$4) \frac{6.6 \times 10^{-7}}{1.1 \times 10^{-9}}$$

$$5) \frac{1 \times 10^{15}}{8 \times 10^{20}}$$

$$6) \frac{1.6 \times 10^2}{4 \times 10^{-17}}$$

$$0.4 \times 10^{19}$$
$$\textcircled{4 \times 10^{18}}$$

