

$$(-3x^5y^4)^4 \quad (190)$$

$$-3^4 \cdot x^{20} \cdot y^{16} = 81x^{20}y^{16}$$

$$\frac{(a^3b^4)^5}{(ab^2)^9} \quad (192)$$

$$\frac{a^{15}b^{20}}{a^9b^{18}} = a^6b^2$$

$$\frac{(a^8b^6)^6}{(b^5a^6)^7} \quad (194)$$

$$\frac{a^{48}b^{36}}{b^{35}a^{42}} = a^5b$$

$$\frac{(a^4 b^6 c)^5}{(a^6 b^{10} c)^3} \quad (196)$$

$$\frac{a^{20} \cancel{b^{30}} c^5}{a^{18} \cancel{b^{30}} c^3} = a^2 c^2$$

$$\frac{(a^3 b^4)^5 a^4 b^4}{(b^6 a^9)^2 (b^3)^4} \quad (198)$$

$$\frac{a^{15} b^{20} a^4 b^4}{b^{12} a^{18} b^{12}} = \frac{a^{19} b^{24}}{a^{18} b^{24}} = a$$

$$\frac{(a^2 b^4)^5 (a^7 b^6)^2}{(a^6 b^8)^2 (a^3 b^4)^4} \quad (200)$$

$$\frac{a^{10} b^{20} a^{14} b^{12}}{a^{24} b^{32}} = 1$$

$$\frac{a^8 b^8 a^8 b^8}{a^{12} b^{16} a^{12} b^{16}} = \frac{1}{a^{24} b^{32}} = 1$$

$$(-3a^4b^7)^3 \cdot (-2a^6b^8)^3 \quad (202)$$

$$-3^3 a^{12} b^{21} \cdot -2^3 a^{18} b^{24}$$

$$6^3 a^{30} b^{45} = 216 a^{30} b^{45}$$

$$(-6m^4)^7 \cdot (-2m^8)^4 \cdot m^{10} \quad (204)$$

$$-6^7 m^{28} - 2^4 m^{32} m^{10}$$

$$\boxed{m^{70} - 279936 \cdot 16}$$

$$\frac{(10a^4b^3c)^2 \cdot (2a^6bc^2)^3}{(40a^{13}b^4c^4)^2} \quad (206)$$

$$10^2 a^8 b^6 c^2 \cdot 2^3 a^{18} b^3 c^6$$

$$40^2 a^{26} b^8 c^8$$

$$\frac{\cancel{a^{26}} b^8 \cancel{c^8} \text{ 800}}{\cancel{a^{26}} b^8 \cancel{c^8} 1600} = b^{\frac{1}{2}} = \frac{b}{2}$$

$$(2a^{3x+1})^2 \cdot (5a^{x+2})^3 \quad (208)$$

$$2^2 a^{6x+2} \quad 5^3 a^{3x+6}$$

$$4 a^{6x+2} \quad 125 a^{3x+6}$$

$$4 \cdot 125 \cdot a^{6x+2+3x+6}$$

$$500 \cdot a^{(9x+8)}$$

$$3^9 \cdot 7^9 \quad (210)$$

$$\boxed{21^9}$$

$$(3^3 \cdot 5^3)^5 \quad (212)$$

$$3^{15} \cdot 5^{15} = 15^{15}$$

$$2^{20} \cdot 3^{10} \quad (214)$$

$$(2^2 \cdot 3)^{10} = 12^{10}$$

$$(2^7 \cdot 3^{14})^8 \quad (216)^{\star}$$

$$2^{56} \cdot 3^{112} = (2 \cdot 3^2)^{56} = 18^{56}$$