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1) $2x^4y^{-2}(2xy^3)^4 = 2x^4y^{-2}(2^4x^4y^{12}) = 2^5x^8y^{10} = 32x^8y^{10}$

3) $(a^4b^{-3})^3\ 2a^3b^{-2} = a^{12}b^9 \cdot 2a^3b^{-2} = 2a^{15}b^{-11} = \frac{2a^{15}}{b^{11}}$

5) $(2x^2y^2)^4x^{-4} = 2^4x^8y^8x^{-4} = 16x^4y^8$

7) $(x^3y^4)\&3\ x^{-4}y^4 = x^9y^{12}x^{04}y^4 = x^5y^{16}$

9) $\frac{2x^{-3}y^2}{3x^{-3}y^3 \cdot 3x^0} = \frac{2y^2x^3}{x^3 \cdot 3y^3 \cdot 3x^0} = \frac{2y^3x^3}{9x^3y^3} = \frac{2}{9y}$

11) $\frac{4xy^{-3} \cdot x^{-4}y^0}{4y^{-1}} = \frac{4xy^0y}{4y^3x^4} = \frac{4xy}{4y^3x^4} = \frac{1}{x^3y^2}$

13) $\frac{u^2v^{-1}}{2u^0v^4 \cdot 2uv} = \frac{u^2}{v \cdot 2u^0v^4 \cdot 2uv} = \frac{u^2}{4uv^6} = \frac{u}{4v^6}$

15) $\frac{u^2}{4u^0v^3 \cdot 3v^2} = \frac{u^2}{12v^5}$

17) $\frac{2y}{(x^0y^2)^4} = \frac{2y}{x^0y^8} = \frac{2}{y^7}$

19) $\left(\frac{2a^2b^3}{a^{-1}}\right)^4 = (2a^2a\ b^3)^4 = (2a^3b^3)^4 = 2^4a^{12}b^{12} = 16a^{12}b^{12}$

21) $\frac{2nm^4}{(2m^2n^2)^4} = \frac{2nm^4}{2^4m^8n^8} = \frac{1}{2^3m^4n^7} = \frac{1}{8m^4n^7}$

23) $\frac{(2mn)^4}{m^0n^{-2}} = \frac{2^4m^4n^4}{m^0n^{-2}} = 2^4m^4n^4n^2 = 16m^4n^6$

25) $\frac{y^3 \cdot x^{-3}y^2}{(x^4y^2)^3} = \frac{y^3x^{-3}y^2}{x^{12}y^6} = \frac{y^3y^2}{x^3x^{12}y^6} = \frac{y^5}{x^{15}y^6} = \frac{1}{x^{15}y}$

27) $\frac{2u^{-2}v^3(2uv^4)^{-1}}{2u^{-4}v^0} = \frac{2u^{-2}v^3 \cdot 2^{-1}u^{-1}v^{-4}}{2u^{-4}v^0} = \frac{2v^3 \cdot u^4}{u^2 2uv^4 \cdot 2v^0} = \frac{2v^3u^4}{4u^3v^4} = \frac{u}{2v}$

29) $\left(\frac{2x^0y^4}{y^4}\right)^3 = (2)^3 = 8$

31) $\frac{y(2x^4y^2)^2}{2x^4y^0} = \frac{y(2^2x^8y^4)}{2x^4y^0} = \frac{4x^8y^5}{2x^4y^0} = 2x^4y^5$

33) $\frac{2yzx^2}{2x^4y^4z^{-2}(zy^2)^4} = \frac{2yzx^2}{2x^4y^4z^{-2}z^4y^8} = \frac{2yz^3x^2}{2x^4y^{12}z^4} = \frac{1}{x^2y^{11}z}$

35) $\frac{2kh^0 \cdot 2h^{-3}k^0}{(2kj^3)^2} = \frac{2kh^0 \cdot 2h^{-3}k^0}{2^2k^2j^6} = \frac{2k \cdot 2}{h^3 \cdot 4k^2j^6} = \frac{4k}{4k^2h^3j^6} = \frac{1}{kh^3j^6}$

37) $\frac{(cb^3)^2 \cdot 2a^{-3}b^2}{(a^3b^{-2}c^3)^3} = \frac{c^2b^6 \cdot 2a^{-3}b^2}{a^9b^{-6}c^9} = \frac{c^2b^62b^2b^6}{a^3a^9c^9} = \frac{2b^{14}c^2}{a^{12}c^9} = \frac{2b^{14}}{a^{12}c^7}$

39) $\frac{(yx^{-4}z^2)^{-1}}{z^3x^2y^3z^{-1}} = \frac{y^{-1}x^4z^{-2}}{x^3x^2y^3z^{-1}} = \frac{x^4z}{yz^2x^3x^2y^3} = \frac{x^4z}{x^2y^4z^5} = \frac{x^2}{y^4z^4}$