Complete as many of the following problems as you can. You do not have to go in order.

(1) Simplify $x^3 \cdot x^2$

(2) Simplify $\dfrac{x^{36}}{x^{29}}$

(3) Simplify $(3x)^3$

(4) Simplify $\left(-\dfrac{2}{x}\right)^2$

(5) Simplify $(-6x^3y)(-2x^5y^2)$

(6) Simplify $\left(\dfrac{x^{-2}y^8}{x^{-4}y^{12}}\right)^{-2}$

(7) Simplify $\left(\dfrac{-10a^{13}b^6}{30a^{18}b^{-3}}\right)^2$

(8) Simplify $\left(\dfrac{30x^{26}y^{45}}{41x^{-32}y}\right)^0$

(9) Convert from standard to scientific notation 4500000

(10) Convert from standard to scientific notation 0.0000212

(11) Convert from scientific to standard notation 4.6×10^{-7}

(12) Convert from scientific to standard notation 1.36×10^7

Key:

(1) x^5

(2) x^7

(3) $27x^3$

(4) $\frac{4}{x^2}$

(5) $12x^8y^3$

(6) $\frac{y^8}{x^4}$

(7) $\frac{b^{18}}{9a^{10}}$

(8) 4.5×10^6

(9) 2.12×10^{-5}

(10) 0.00000046

(11) 13600000