Name: _____

Complete as many of the following problems as you can with your table. If your entire table finishes early, you may leave early or work on homework.

(1) Evaluate each exponential expression.

    (a) $2^2 \cdot 2^5$

    (b) $7^2 \cdot 7^{-3}$

    (c) $\dfrac{3^4}{3^7}$

(2) Simplify each exponential expression.

    (a) $x^{-3}y$

    (b) $x^3 \cdot x^2$

    (c) $(8x^3)^2$

    (d) $\dfrac{x^{36}}{x^{29}}$

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

(3) Simplify each exponential expression.

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

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

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

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

(4) Convert the number from scientific notation to standard (decimal) form.

    (a) 4×10^5 (c) 9.46×10^4

    (b) 5.26×10^{-3} (d) 4.3×10^{-6}

(5) Write the given number in scientific notation.

    (a) 0.066 (c) $7,640,000,000$

    (b) 0.000317 (d) $595,000$