

Name: _____

Date: _____

Assignment Handout**Example** Evaluate the following expressions. Show all your work.

a. $y^{64} \times y^{42}$ b. $\frac{q^{78}}{q^{42}}$ c. $\frac{a^{23}}{b^{17}}$ d. $(x^{13})^4$

e. $p^{90} \times q^{12}$ f. $\frac{z}{z^8}$ g. $\frac{c^{12}}{c^{27}}$ h. $\left(\frac{d^3}{d^9}\right)^4$

Example Evaluate the following expressions. Show all your work.

i. $\left(\frac{9}{12a}\right)^3$ j. $(3xy)^4$ k. $(m^2n^5)^3$ l. $(-2ab)(-4m^3n^2)$

m. $\left(\frac{c^5}{d^3}\right)^{-4}$ n. $(c^3d^4)^{-5}$ o. $(2xy^{-4})^5$ p. $(-3a^{-4}b^{-5})^{-3}$

q. $\frac{x^9y^5}{x^6y^{-2}}$ r. $\frac{a^4}{a^5} \times a^{-6}$