

Name _____

Power of Quotient

Simplify the exponents.

1) $\left(\frac{9^3}{9^7}\right)^3$ $\frac{1}{9^{12}}$	5) $\left(\frac{5^2}{5^5}\right)^5$ $\frac{1}{5^{15}}$
2) $\left(\frac{3^2}{3^7}\right)^6$ $\frac{1}{3^{30}}$	6) $\left(\frac{2^{10}}{2^{15}}\right)^5$ $\frac{1}{2^{25}}$
3) $\left(\frac{6^8}{6^{12}}\right)^3$ $\frac{1}{6^{12}}$	7) $\left(\frac{8^4}{8^9}\right)^7$ $\frac{1}{8^{35}}$
4) $\left(\frac{10^2}{10^7}\right)^8$ $\frac{1}{10^{40}}$	8) $\left(\frac{4^7}{4^{15}}\right)^3$ $\frac{1}{4^{24}}$