

Name _____

Power of Quotient

Simplify the exponents. (Radicals)

1) $\left(\frac{\sqrt{2a^3}}{3b}\right)^2$ $\frac{2a^3}{9b^2}$	2) $\left(\frac{\sqrt[3]{4x^2}}{5y^2}\right)^3$ $\frac{64x^2}{125y^6}$	3) $\left(\frac{\sqrt{3p^2}}{q^{-2}}\right)^4$ $81p^4q^8$
4) $\left(\frac{\sqrt{5m^3n^2}}{2p}\right)^2$ $\frac{5m^3n^2}{4p^2}$	5) $\left(\frac{\sqrt{2x^{1/2}y^3}}{3z}\right)^3$ $\frac{8x^{3/2}y^9}{27z^3}$	6) $\left(\frac{\sqrt[4]{ab^2}}{3cd}\right)^2$ $\frac{a^{1/2}b}{9c^2d^2}$
7) $\left(\frac{\sqrt{3pq^2}}{2r^3s}\right)^4$ $\frac{81p^4q^8}{16r^6s^4}$	8) $\left(\frac{\sqrt{2xy^2z}}{3w}\right)^3$ $\frac{8xy^2z}{27w^2}$	9) $\left(\frac{\sqrt{5a^3b^2}}{2cd}\right)^2$ $\frac{5a^3b^2}{4c^2d^2}$
10) $\left(\frac{\sqrt{4ab^2c}}{5def^2}\right)^3$ $\frac{64ab^2c}{125d^3e^3f^6}$	11) $\left(\frac{\sqrt[3]{3u^2v}}{2wxyz}\right)^2$ $\frac{3u^{2/3}v^{2/3}}{4w^2x^2y^2z^2}$	12) $\left(\frac{\sqrt{2m^3n^2}}{3pqr}\right)^3$ $\frac{8m^3n^2}{27p^3q^3r^3}$