Name _____

Exponents (Quotient of powers)

By Using the law Quotient of powers,
write each expression in a single exponent. ($x^m / x^n = x^{m-n}$)

1) $\frac{(15)^5}{(15)^{-2}}$ 15^7	2) $\frac{23^{17}}{23^9}$ 23^8	3) $\frac{(-9)^{-8}}{(-9)^{-12}}$ $(-9)^4$
4) $\frac{(-17)^{-15}}{(-17)^{-7}}$ $(-17)^{-8}$	5) $\frac{(-14)^{-9}}{(-14)^5}$ $(-14)^{-14}$	6) $\frac{(11)^{-7}}{(11)^{-2}}$ $(11)^{-5}$
7) $\left(\frac{5}{7}\right)^{10} \div \left(\frac{5}{7}\right)^4$ $\left(\frac{5}{7}\right)^6$	8) $\left(\frac{10}{17}\right)^{19} \div \left(\frac{10}{17}\right)^7$ $\left(\frac{10}{17}\right)^{12}$	9) $\left(\frac{2}{9}\right)^5 \div \left(\frac{2}{9}\right)^{-4}$ $\left(\frac{2}{9}\right)^9$
10) $\left(\frac{14}{25}\right)^{-12} \div \left(\frac{14}{25}\right)^{-5}$ $\left(\frac{14}{25}\right)^{-7}$	11) $\left(\frac{-3}{8}\right)^{14} \div \left(\frac{-3}{8}\right)^{-9}$ $\left(\frac{-3}{8}\right)^{23}$	12) $\left(\frac{-10}{19}\right)^{-15} \div \left(\frac{-10}{19}\right)^{-3}$ $\left(\frac{-10}{19}\right)^{-12}$