Name _____

Exponents (Power of a power)

By Using the law Power of a power,
write each expression in a single exponent. $(x^m)^n = x^{mn}$

1) $(r^5)^3$ r^{15}	2) $(a^2)^{-3}$ $(a)^{-6}$	3) $(x^3)^{-4}$ $(x)^{-12}$
4) $(-a^{-3})^3$ $(-a)^{-9}$	5) $(b^{-2})^4$ $(b)^{-8}$	6) $(r^{-3})^{-5}$ r^{15}
7) $\left(\left(\frac{c}{d}\right)^3\right)^5$ $\left(\frac{c}{d}\right)^{15}$	8) $\left(\left(\frac{x}{z}\right)^4\right)^2$ $\left(\frac{x}{z}\right)^8$	9) $\left(\left(\frac{1}{a}\right)^{-3}\right)^{-2}$ $\left(\frac{1}{a}\right)^6$
10) $\left(\left(\frac{-5}{m}\right)^{-4}\right)^{-3}$ $\left(\frac{-5}{m}\right)^{12}$	11) $\left(\left(\frac{-1}{xy}\right)^{-2}\right)^4$ $\left(\frac{-1}{xy}\right)^{-8}$	12) $\left(\left(\frac{-c}{x}\right)^{-5}\right)^5$ $\left(\frac{-c}{x}\right)^{-25}$