Name _____

Exponents (Power of a product)

By Using the law Power of a product,
write each expression in a single exponent. $(x^m \cdot y^m) = xy^m$

1) $4^5 \cdot 3^5$ 12^5	2) $15^2 \cdot 2^2$ 30^2	3) $(-3)^3 \cdot 4^3$ $(-12)^3$
4) $12^{-2} \cdot 3^{-2}$ $(-36)^{-2}$	5) $9^8 \cdot 3^8$ 27^8	6) $(-4)^3 \cdot (-5)^3$ 20^3
7) $\left(\frac{5}{12}\right)^5 \cdot \left(\frac{4}{5}\right)^5$ $\left(\frac{1}{3}\right)^5$	8) $\left(\frac{3}{10}\right)^{-3} \cdot \left(\frac{15}{25}\right)^{-3}$ $\left(\frac{9}{50}\right)^{-3}$	9) $\left(\frac{1}{16}\right)^4 \cdot \left(\frac{8}{24}\right)^4$ $\left(\frac{1}{48}\right)^4$
10) $\left(\frac{-3}{15}\right)^{-2} \cdot \left(\frac{4}{15}\right)^{-2}$ $\left(\frac{-4}{75}\right)^{-2}$	11) $\left(\frac{-8}{24}\right)^6 \cdot \left(\frac{-3}{4}\right)^6$ $\left(\frac{1}{4}\right)^6$	12) $\left(\frac{-3}{24}\right)^3 \cdot \left(\frac{4}{15}\right)^3$ $\left(\frac{-1}{30}\right)^3$