

Name _____

Solving Fractions With Exponents

Express each of the following as a rational number.

1) $\left(\frac{2}{5}\right)^4 \times \left(\frac{1}{5}\right)^{-2}$ $\frac{16}{25}$	2) $\left(\frac{8}{5}\right)^{-2} \times \left(\frac{1}{8}\right)^3$ 200
3) $\left(\frac{4}{5}\right)^3 \times \left(\frac{1}{2}\right)^2$ $\frac{16}{125}$	4) $\left(\frac{3}{7}\right)^3 \times \left(\frac{4}{7}\right)^{-3}$ $\frac{27}{64}$
5) $\left(\frac{3}{5}\right)^{-4} \times \left(\frac{1}{5}\right)^3$ $\frac{5}{81}$	6) $\left(\frac{1}{4}\right)^{-2} \times \left(\frac{3}{4}\right)^2$ 9
7) $\left(\frac{1}{5}\right)^2 \times \left(\frac{5}{9}\right)^2$ $\frac{1}{81}$	8) $\left(\frac{2}{4}\right)^3 \times \left(\frac{1}{4}\right)^{-2}$ 2