Name _____

Solving Fractions With Exponents

Find the value of x.

1) $\left(\frac{2}{5}\right)^{7} \times \left(\frac{2}{5}\right)^{2} = \left(\frac{2}{5}\right)^{x}$	2) $\left(\frac{3}{7}\right)^{10} \times \left(\frac{3}{7}\right)^{-3} = \left(\frac{3}{7}\right)^{x}$
3) $\left(\frac{2}{9}\right)^{30} \times \left(\frac{2}{9}\right)^{24} = \left(\frac{2}{9}\right)^{2x}$	4) $\left(\frac{5}{8}\right)^{12} \times \left(\frac{5}{8}\right)^{4} = \left(\frac{5}{8}\right)^{4x}$
5) $\left(\frac{4}{5}\right)^{7} \div \left(\frac{4}{5}\right)^{4} = \left(\frac{4}{5}\right)^{x}$	6) $\left(\frac{2}{7}\right)^{14} \div \left(\frac{2}{7}\right)^{2} = \left(\frac{2}{7}\right)^{2x}$
7) $\left(\frac{3}{4}\right)^{6} \div \left(\frac{3}{4}\right)^{9} = \left(\frac{3}{4}\right)^{x}$	8) $\left(\frac{5}{6}\right)^{4} \div \left(\frac{5}{6}\right)^{7} = \left(\frac{5}{6}\right)^{2x - 1}$

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