## Powers and Polynomials Quiz Review

## Remember:

$$
\begin{aligned}
& \left(a^{m}\right)\left(a^{n}\right)=a^{m+n} \\
& \left(a^{m}\right) \div\left(a^{n}\right)=a^{m-n} \\
& \left(a^{m}\right)^{n}=a^{m n} \text { and }\left(\frac{a^{m}}{b^{n}}\right)^{p}=\frac{a^{m p}}{b^{n p}}
\end{aligned}
$$

Complete the following as review for the quiz:

$$
\text { p. } 101 \# 4-7,10,12 .
$$

## Example One

Simplify the following expression. Leave your answer as an exponential number.

$$
\left[\frac{\left(7^{2}\right)^{3} 7^{8}}{7^{4} 7^{5}}\right]^{4}
$$

## Example Two

Simplify the following expression.

$$
\left(9 w^{4} x^{3} y^{8}\right)\left(7 y^{10} w^{6} y^{3}\right)
$$

