

## Section 4.6 Focus Exercises

1. Rewrite each expression with a positive exponent. (Remember the *meaning* of the negative exponent.) Evaluate if possible.

a)  $8^{-1} =$

b)  $3^{-4} =$

c)  $11^{-2} =$

d)  $x^{-1} =$

e)  $y^{-2} =$

f)  $w^{-6} =$

2. Rewrite each expression with positive exponents only. (Remember the *meaning* of the negative exponent.) Evaluate if possible.

a)  $\left(\frac{3}{5}\right)^{-1} =$

b)  $\left(\frac{1}{2}\right)^{-5} =$

c)  $\left(\frac{2}{11}\right)^{-2} =$

d)  $\left(\frac{b}{c}\right)^{-5} =$

e)  $\left(\frac{1}{4m}\right)^{-3} =$

f)  $\left(\frac{2x}{w}\right)^{-4} =$

3. Simplify each expression. Be sure to write the result with positive exponents only.

a)  $m^4 \cdot m^{-3}$

b)  $p^{-7} \cdot p^6$

c)  $k^9 \cdot k^{-3}$

d)  $h^{-8} \cdot h^{-5}$

e)  $\frac{y^1}{y^{-5}}$

f)  $\frac{m^{-7}}{m^{-4}}$

g)  $\frac{m^{-5}}{m^{-9}}$

h)  $\frac{k^{-1}}{k^6}$

i)  $(x^{-1})^5$

j)  $(m^7)^{-1}$

k)  $(h^{-1})^{-8}$

l)  $(y^{-4})^{-9}$