## Exercise 37

For the following exercises, evaluate the expressions using the given variable.

$$
\frac{1}{4}\left(8 w-4^{2}\right) \text { for } w=1
$$

## Solution

Simplify the given expression before plugging in $w=1$.

$$
\begin{aligned}
\frac{1}{4}\left(8 w-4^{2}\right) & =\frac{1}{4}(8 w-16) \\
& =2 w-4 \\
& =2(1)-4 \\
& =2-4 \\
& =-2
\end{aligned}
$$

