## Exercise 40

For the following exercises, simplify the expression.

$$
\frac{a}{2^{3}}(64)-12 a \div 6
$$

## Solution

Use the order of operations to simplify the given expression.

$$
\begin{aligned}
\frac{a}{2^{3}}(64)-12 a \div 6 & =\frac{a}{8}(64)-12 a \div 6 \\
& =\frac{a}{8}(64)-\frac{12 a}{6} \\
& =a(8)-2 a \\
& =8 a-2 a \\
& =6 a
\end{aligned}
$$

