## Exercise 42

In the following exercises, simplify the following expressions by combining like terms.

$$
5 b^{2}+9 b+10+2 b^{2}+3 b-4
$$

## Solution

Group the terms with $b^{2}$ together, group the terms with $b$ together, and group the terms without $b$ togther.

$$
\begin{aligned}
5 b^{2}+9 b+10+2 b^{2}+3 b-4 & =\left(5 b^{2}+2 b^{2}\right)+(9 b+3 b)+(10-4) \\
& =7 b^{2}+12 b+6
\end{aligned}
$$

