Exercise 41

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

$$3x^2 + 12x + 11 + 14x^2 + 8x + 5$$

Solution

Group the terms with x^2 together, group the terms with x together, and group the terms without x together.

$$3x^{2} + 12x + 11 + 14x^{2} + 8x + 5 = (3x^{2} + 14x^{2}) + (12x + 8x) + (11 + 5)$$
$$= 17x^{2} + 20x + 16$$