Combine Like Terms and Expand Terms - Guided Lesson Explanation

In all the problems you first find terms that are the same and have the same variables. Combine those variables by adding them together.

Explanation#1

$$6x^2 + 3x + 4x + 3x^2$$
 Put like parts together.

$$(6x^2 + 3x^2) (3x + 4x)$$
 Combine them by adding.

$$9x^2 + 7x$$

Explanation#2

$$4(x + 9)$$

4(x + 9) multiply all terms by 4

$$(4 \times x) + (4 \times 9)$$

$$4x + 36$$

Explanation#3

$$3x(x^2 + 12)$$

 $3x(x^2 + 12)$ Multiply all terms by 3x

$$(3x \ x \ x^2) \ (3x \ x \ 12)$$

$$3x^3 + 36x$$