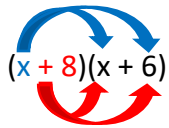


Practice Problem Set

ANSWER KEY

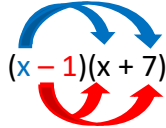
Multiply. All answers should be written in standard form. Use the distributive property or box method.

1. $(x + 8)(x + 6)$



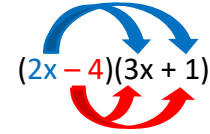
$$\begin{aligned} & x^2 + 6x + 8x + 48 \\ & x^2 + \underbrace{6x + 8x} + 48 \\ & x^2 + 14x + 48 \end{aligned}$$

2. $(x - 1)(x + 7)$



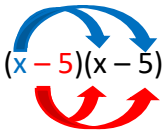
$$\begin{aligned} & x^2 + 7x - x - 7 \\ & x^2 + \underbrace{7x - x} - 7 \\ & x^2 + 6x - 7 \end{aligned}$$

3. $(2x - 4)(3x + 1)$



$$\begin{aligned} & 6x^2 + 2x - 12x - 4 \\ & 6x^2 + \underbrace{2x - 12x} - 4 \\ & 6x^2 - 10x - 4 \end{aligned}$$

4. $(x - 5)^2$ means $(x - 5)(x - 5)$



$$\begin{aligned} & x^2 - 5x - 5x + 25 \\ & x^2 - \underbrace{5x - 5x} + 25 \\ & x^2 - 10x + 25 \end{aligned}$$

5. $(3x^2 + 4)(3x^2 - 4)$

$$(3x^2 + 4)(3x^2 - 4)$$

$$\begin{aligned} & 9x^4 - 12x^2 + 12x^2 - 16 \\ & 9x^4 - \underbrace{12x^2 + 12x^2} - 16 \\ & 9x^4 - 16 \end{aligned}$$

6. $(x - 3)(4x^2 + 9x - 2)$

	$4x^2$	$9x$	-2
x	$4x^3$	$9x^2$	$-2x$
-3	$-12x^2$	$-27x$	6

$$4x^3 - 3x^2 - 29x + 6$$