

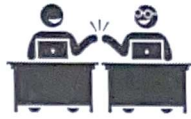
Name:

ANSWERS!

Class:



Communication



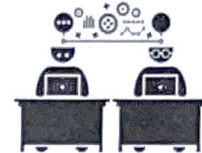
Successful Partnership



Encouragement



Solving Problem Together



Collaboration

first F.O.I.L. Then distribute!

Question 01

$$2(x + 4)(x + 3) = ax^2 + bx + c$$

$$2(x^2 + 3x + 4x + 12)$$

$$2(x^2 + 7x + 12)$$

$$2x^2 + 14x + 24$$

$$a = 2 \quad b = 14 \quad c = 24$$

Question 02

$$-3(x + 5)(x - 2) = ax^2 + bx + c$$

$$-3(x^2 - 2x + 5x - 10)$$

$$-3(x^2 + 3x - 10)$$

$$-3x^2 - 9x + 30$$

$$a = -3 \quad b = -9 \quad c = 30$$

Question 03

$$-(x - 6)(x + 2) = ax^2 + bx + c$$

$$-1(x^2 + 2x - 6x - 12)$$

$$-1(x^2 - 4x - 12)$$

$$-x^2 + 4x + 12$$

$$a = -1 \quad b = 4 \quad c = 12$$

Question 04

$$2(x - 3)(x - 5) = ax^2 + bx + c$$

$$2(x^2 - 5x - 3x + 15)$$

$$2(x^2 - 8x + 15)$$

$$2x^2 - 16x + 30$$

$$a = 2 \quad b = -16 \quad c = 30$$

Question 05

$$\begin{aligned}-(x+2)(x+6) &= ax^2 + bx + c \\ -1(x^2 + 6x + 2x + 12) \\ -1(x^2 + 8x + 12) \\ -x^2 - 8x - 12\end{aligned}$$

$$a = -1 \quad b = -8 \quad c = -12$$

Question 06

$$\begin{aligned}2(x+3)(x-5) &= ax^2 + bx + c \\ 2(x^2 - 5x + 3x - 15) \\ 2(x^2 - 2x - 15) \\ 2x^2 - 4x - 30\end{aligned}$$

$$a = 2 \quad b = -4 \quad c = -30$$

Question 07

$$\begin{aligned}-2(x-4)(x+3) &= ax^2 + bx + c \\ -2(x^2 + 3x - 4x - 12) \\ -2(x^2 - x - 12) \\ -2x^2 + 2x + 24\end{aligned}$$

$$a = -2 \quad b = 2 \quad c = 24$$

Question 08

$$\begin{aligned}3(x-5)(x-2) &= ax^2 + bx + c \\ 3(x^2 - 2x - 5x + 10) \\ 3(x^2 - 7x + 10) \\ 3x^2 - 21x + 30\end{aligned}$$

$$a = 3 \quad b = -21 \quad c = 30$$

Question 09

$$\begin{aligned}-(x+4)(x-5) &= ax^2 + bx + c \\ -1(x^2 - 5x + 4x - 20) \\ -1(x^2 - x - 20) \\ -x^2 + x + 20\end{aligned}$$

$$a = -1 \quad b = 1 \quad c = 20$$

Question 10

$$\begin{aligned}2(x-3)(x+6) &= ax^2 + bx + c \\ 2(x^2 + 6x - 3x - 18) \\ 2(x^2 + 3x - 18) \\ 2x^2 + 6x - 36\end{aligned}$$

$$a = 2 \quad b = 6 \quad c = -36$$