

Name: _____ Date: _____

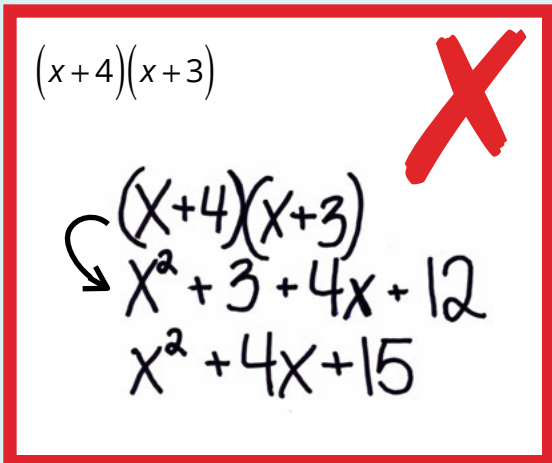
Teacher: _____ Section: _____

For each set, first examine the problem on the left and answer the question(s) about it. Then complete the similar problem on the right.

multiplying binomials

SET 1: Multiply the binomials. SHOW ALL OF YOUR WORK.

Ebony tried to find the product but she **didn't** do it correctly. Here is her work:


$$(x+4)(x+3)$$
$$(x+4)(x+3)$$
$$\rightarrow x^2 + 3 + 4x + 12$$
$$x^2 + 4x + 15$$

- In the step marked with an arrow, what mistake did Ebony make?

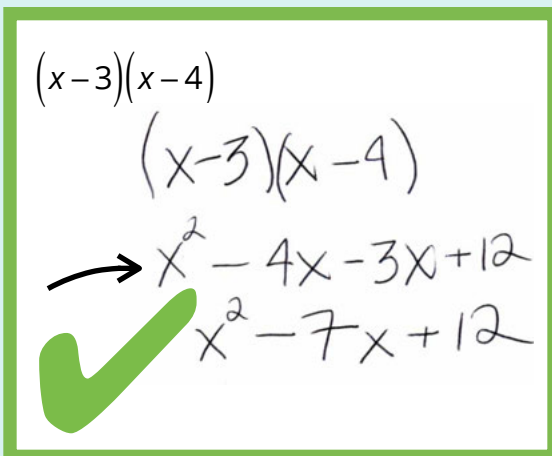


Your Turn:

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

SET 2: Multiply the binomials. SHOW ALL OF YOUR WORK.

Letizia multiplied **correctly**. Here is her work:


$$(x-3)(x-4)$$
$$(x-3)(x-4)$$
$$\rightarrow x^2 - 4x - 3x + 12$$
$$x^2 - 7x + 12$$

- In the step marked with an arrow, where did the + sign come from?

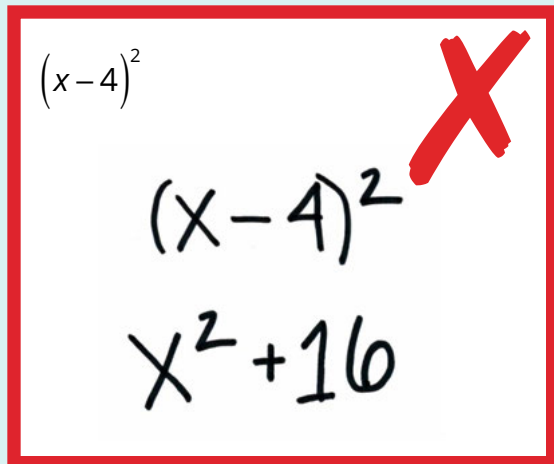


Your Turn:

$$(x-3)(x-6)$$

SET 3: Multiply the binomials. SHOW ALL OF YOUR WORK.

Chuck tried to find the product but **didn't** do it correctly. Here is his work:



$$(x-4)^2$$

$$(X-4)^2$$

$$x^2 + 16$$

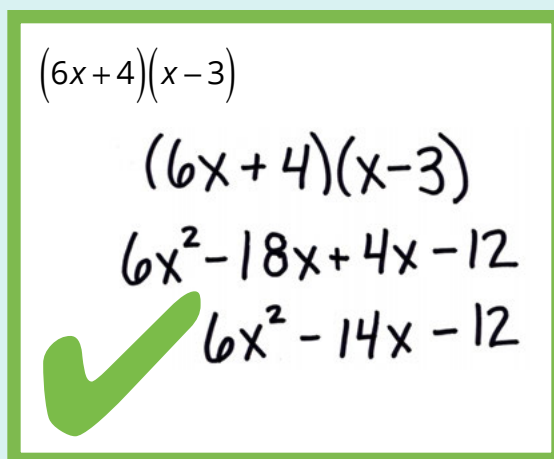
- What is another way that Chuck could have written $(x-4)^2$?
- How would that have helped him get the correct answer?

**Your Turn:**

$$(x+4)^2$$

SET 4: Multiply the binomials. SHOW ALL OF YOUR WORK.

Shu-Ju multiplied **correctly** to find the product. Here is her work:



$$(6x+4)(x-3)$$

$$(6x+4)(x-3)$$

$$6x^2 - 18x + 4x - 12$$

$$6x^2 - 14x - 12$$

- Where did the $-14x$ come from in Shu-Ju's answer?
- Would the same answer be correct if the problem was $(x-3)(6x+4)$? Explain why or why not.

**Your Turn:**

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