Name: _____ Date: _____

Teacher: _____ Section: _____
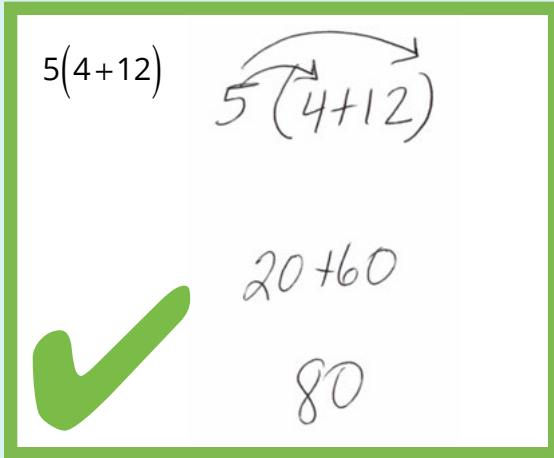
✔Algebra**By**E**x**ample

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.   **distributive property**

SET 1: Using the distributive property, rewrite the expression in **simplest form**. SHOW ALL OF YOUR WORK.

Makala rewrote this expression **correctly**.
Here is what she wrote:

$5(4+12)$

$5(4+12)$

$20+60$

80

✔

🟢 Why was it important for Makala to multiply the 5 by both the 4 and the 12?

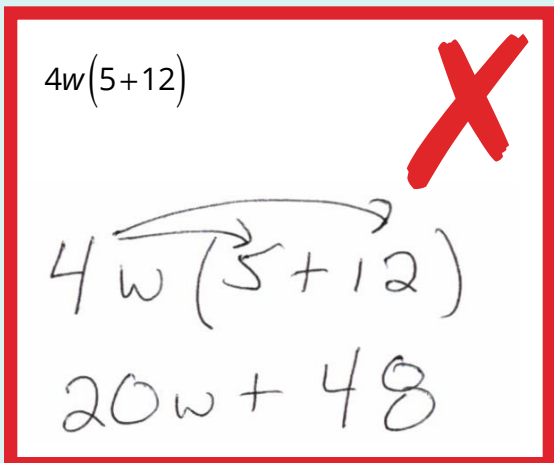🟢 Is 5(4) + 12 the same expression as 5(4 + 12) ? Explain.

✏ **Your Turn:**

$4(12-5)$

SET 2: Using the distributive property, rewrite the expression in **simplest form**. SHOW ALL OF YOUR WORK.

Pablo **didn't** rewrite this expression correctly.
Here is what he wrote:

$4w(5+12)$

✗

$4w(5+12)$

$20w+48$

🔴 What did Pablo forget when distributing the 4w?

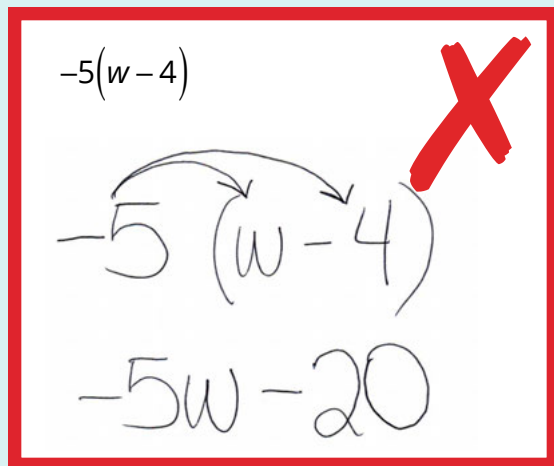🔴 What should Pablo's final expression be?

✏ **Your Turn:**

$-4w(5+12)$

SET 3: Using the distributive property, rewrite the expression in **simplest form**. SHOW ALL OF YOUR WORK.

Destiny **didn't** rewrite this expression correctly.
Here is what she wrote:

$-5(w-4)$

$-5\,(w-4)$

$-5w-20$

- What did Destiny do wrong when applying the distributive property?

- You can change just one small part in Destiny's answer and make it correct. Explain what you can change.
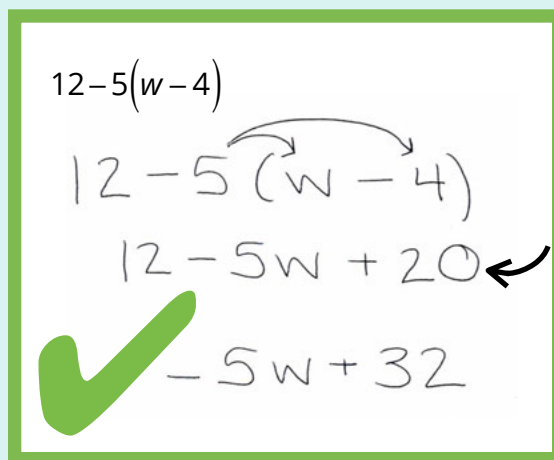
Your Turn:

$-5(w+4)$

SET 4: Using the distributive property, rewrite the expression in **simplest form**. SHOW ALL OF YOUR WORK.

Paul rewrote this expression **correctly**.
Here is what he wrote:

$12-5(w-4)$

$12-5\,(w-4)$

$12-5w+20$

$-5w+32$

- Where did the +20 come from in the step marked with an arrow?

- Would he have gotten the same answer if he first subtracted 5 from 12? Explain.

Your Turn:

$12+5(w-4)$