

Algebra reasoning — Distributing

Name: _____

Date: _____

Read each line of working and choose the answer that is correct.

1 Ana says $5(x + 6) + 5(x + 5)$ comes to $10x + 55$. Which is correct?

$6x + 35$

$10x + 31$

$10x + 750$

$10x + 55$

Why? nothing went wrong — the line as written is already correct.

2 Check this line: $6(x + 6) + 3(x + 6) = 9x + 54$. Which is correct?

$9x + 54$

$7x + 42$

$9x + 648$

$9x + 24$

Why?

3 Sam wrote $5(x + 5) + 5(x + 4) = 10x + 25$. Which is correct?

$10x + 500$

$10x + 45$

$10x + 25$

$6x + 29$

Why?

4 Spot the mistake: $6(x + 4) + 3(x + 6) = 9x + 432$. Which answer is right?

$9x + 432$

$7x + 30$

$9x + 42$

$9x + 22$

Why?



Algebra reasoning · Distributing — Answer key

1. $5(x + 6) + 5(x + 5) = 10x + 55$, which is what was written — this line is correct

2. $6(x + 6) + 3(x + 6) = 9x + 54$, which is what was written — this line is correct

3. $5(x + 5) + 5(x + 4) = 10x + 45$, not $10x + 25$ (the first bracket reached its x but not its number)

4. $6(x + 4) + 3(x + 6) = 9x + 42$, not $9x + 432$ (the two numbers were multiplied together where they should be added)