

Rugger has completed his Year 9 Algebra homework.
Mark his homework for him and correct any mistakes he makes.

1. Simplify

a) $x + 4x + 3x - 7x = x$

b) $4b + 3c - 2b + 5c = 2b + 8c$

c) $2x + 3y + 2y = 7xy$

d) $5x \times 3x \times 2 = 30x$

2. Expand

a) $3(x + 5) = 3x + 15$

b) $5(x - 3) = 5x - 3$

c) $7(4y + 2) = 28y + 9$

3. Factorise

a) $5x + 25 = 5(x + 5)$

b) $21y - 3 = 7(3y - 0)$

c) $24x - 42y = 3(8x - 14y)$

4. Solving

a) $x - 5 = 23$

$x = 28$

b) $5x = 45$

$x = 9$

c) $3x - 6 = -9$

$x = 5$

d) $7x = 3x - 4$

$x = 1$

