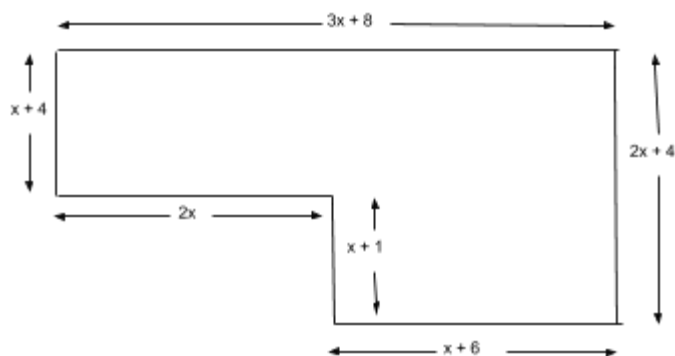


QT Algebra like terms, multiplying and factorisation

1. Simplify the expression by collecting like terms:

a.	$5a + 3a + 7a$	b.	$7a - 2b + 4b + 12a$
c.	$5x - 2x + 7x - 2y + 5y$	d.	$4xy^2 - 2x^2y + 8x^2y - 7xy^2$

2. Simplify, by collecting like terms, the perimeter of the floor



3. Multiply out the brackets and simplify where possible

a.	$3(x + 3)$	b.	$2(X + y)$
c.	$-4(2x + y)$	d.	$6(x + 2) + 4(x + 1)$
e.	$3(x - 1) + 5(x + 2)$	f.	$6(3x + 2) - 2(x - 4)$

4. Find the product of $4x + 6$ and $4x + 3$

5. A rectangular lawn has a length of $(4x + 2)$ metres and a width of $x - 3$ metres. Write down a simplified expression for:

- the lawn perimeter
- the lawn area

6. Factorise the following

a.	$4x^2 + 2$	b.	$3y - 6$
c.	$16x + 20$	d.	$3x^2 + 9x$
e.	$20x - 25x^2$	f.	$x^2 - 15x$