

M9

## Solving Equations with Brackets

3.7

- Remember:
  - Whenever there are brackets, multiplication is involved.
  - If there is more than one term in the brackets, you have to remember to use the **distributive property**.
  - After distributing, collect like terms. = Terms that contain the same variable are added/subtracted together and constant terms are added/subtracted together.

### Collecting Like Terms

$5x + 7 - x + 14$
$x + 7 + 9x + 3x + 1$
$4a + 7b + 9 - 3 + 1b$
$0.5y + 2.5 - y + 3 + y$

Solve the following equations:

L1	$2(3x + 1) + 3(x + 4) = 41$
----	-----------------------------

L2	$4(x - 7) - 2(x + 5) = 12$
L3	$2x + 8 - 4(x + 5) = 6(x + 10)$
L4	$\frac{8x - 1}{2} = \frac{4x + 9}{6}$

