

Expanding and Factorising

Expand $2(3x - 5)$	Expand $4y(y + 7)$	Factorise $6b + 10$	Factorise $a^2 - 3a$
<p>Multiply each term in the bracket by 2:</p> $\begin{aligned} 2(3x - 5) \\ = 2 \times 3x - 2 \times 5 \\ = 6x - 10 \end{aligned}$	<p>Multiply each term by $4y$:</p> $\begin{aligned} 4y(y + 7) \\ = 4y \times y + 4y \times 7 \\ = 4y^2 + 28y \end{aligned}$	<p>Find common factors of $6b$ and 10: Common factor is 2 $6b + 10 = 2 \times 3b + 2 \times 5 \\ = 2(3b + 5)$</p>	<p>Find common factors of a^2 and $3a$: Common factor is a $a^2 - 3a = a \times a - 3 \times a \\ = a(a - 3)$</p>
Expand $4(a + 6)$	Expand $3x(x - 2)$	Factorise $5x + 20$	Factorise $x^2 + 9x$
$4a + 24$	$3x^2 - 6x$	$5(x + 4)$	$x(x + 9)$
Expand $5(2d - 1)$	Expand $5a(4 + a)$	Factorise $16 - 8y$	Factorise $d^2 - 7d$
$10d - 5$	$20a + 5a^2$	$8(2 - y)$	$d(d - 7)$
Expand $7(3 + 4w)$	Expand $2f(f - 6)$	Factorise $8w - 12$	Factorise $2y^2 + 3y$
$21 + 28w$	$2f^2 - 12f$	$4(2w - 3)$	$y(2y + 3)$
Expand $-4(2x + 5)$	Expand $4b(2b + 5)$	Factorise $7a + 7$	Factorise $6a - 5a^2$
$-8x - 20$	$8b^2 + 20b$	$7(a + 1)$	$a(6 - 5a)$