> **YOU & MATHS** **A little trick** Calculate these products in your mind.
> Be careful: they require a little trick! Can you figure it out?
> **a.** $(5 + d)(d - 5)$;
> **b.** $(a + k)(- k + a)$;
> **c.** $(- b + 13)(- 13 - b)$.

When the sum of two monomials is multiplied by their difference, then the product is the difference of their squares: $(A + B)(A - B) = A^2 - B^2$.

For the first two products you need to be careful about which square to write first. Look at the parenthesis with the minus sign: it will tell you which term to write first. Then use the commutative property of addition.

$$(5 + d)(d - 5) = (d + 5)(d - 5) = d^2 - 25 \qquad\qquad (A = d, B = 5)$$

$$(a + k)(- k + a) = (a + k)(a - k) = a^2 - k^2 \qquad\qquad (A = a, B = k)$$

In the third product there are two minus signs in the second parenthesis, so you can factor out -1 and reduce to the cases above.

$$(- b + 13)(- 13 - b) = -1(- b + 13)(b + 13) = -(13 + b)(13 - b) = -(169 - b^2) = b^2 - 169.$$

Alternatively, setting $A = -b$ and $B = 13$, you can calculate:

$$(- b + 13)(- 13 - b) = (- b + 13)(- b - 13) = (A + B) \cdot (A - B) = A^2 - B^2 = b^2 - 169.$$