

YOU & MATHS No blanks, please! Fill in the blanks.

a. $(5 + a)(5 - a) = \square^2 - \square^2;$

b. $(x + \square)(\square - 1) = x^2 - 1;$

c. $(b + 3)(b - \square) = \square^2 - 9;$

d. $(-5 + \square)(\square - y) = 25 - y^2.$

We need to find the missing terms in the equalities between the product of the sum of two terms times their difference and the expansion of the product (that turns into the difference of the squares of the terms). In other words, we need to find the missing terms in equalities like the following: $(A + B)(A - B) = A^2 - B^2$.

a. $A = 5$ and $B = a$, so $(5 + a)(5 - a) = 5^2 - a^2$.

b. $A = x$ and $B = 1$, so $(x + 1)(x - 1) = x^2 - 1$.

c. $A = b$ and $B = 3$, so $(b + 3)(b - 3) = b^2 - 9$.

d. $A = -5$ and $B = y$, so $(-5 + y)(-5 - y) = 25 - y^2$.