

Questions/Misconceptions

1. I am not sure if the number 1 is a perfect square or not.
2. What if the powers for the numbers in the difference of 2 squares are negative
3. In $a^2 - b^2 = (a+b)(a-b)$, a and b should be integers and not irrational numbers.

Questions/Misconceptions

4. In the expression of $y(x+z)^2$, i am not very sure which step i should calculate first
5. Can the method in Q2 be applied to negative numbers? Example: $301 \times (-299)$
6. What is the solution for square root 5 + square root 5?

Questions/Misconceptions

- **7. Q1 No, it is not possible. Let us give a value to a and x and assume that a is 2 and x is 3. a^x to the power of two becomes 18 and then 1 to the power of 2 is also one, thus, we can treat the 1 in the question like it has a power of 2. Then we work out the equation. $18-1$ is 17, and if you use the difference of two squares formula, the answer we get is not 17.**

Questions/Misconceptions

8. why is it when for example, $a - 3$ squared is $(a + 3)(a - 3)$ not $(a - 3)^2$.

9. However, if A is not a perfect square, it still works. Eg. $A = 3$,

$$(Ax^2 - 1) = (\sqrt{3}x - 1)(\sqrt{3}x + 1)$$

10. I would like to know what formula to apply if the squares were changed to cubes

Questions/Misconceptions

11. why in $a^2 - b^2$, a and b must be integers and why this rule does not apply for numbers with decimal points.
12. Is that all of the identities or are there more of them?