

What is wrong?

Step 1: Let $a = b$.

Step 2: $a^2 = ab$.

Step 3: $a^2 - b^2 = ab - b^2$.

Step 4: $(a - b)(a + b) = (a - b)b$.

Step 5: ~~$(a - b)$~~ $(a + b) = \langle a - b \rangle b$.

Step 6: $a + b = b$.

Step 7: Let $a = b = 1$.

Step 8: $1 + 1 = 1$.

(A) Step ... is wrong because

(B) Nothing is wrong because