FIND THE ERRORS!

We are going to prove that 1 = 2.

Assume that

$$a = b$$
.

Then

$$a^2 = ab$$
.

Subtract b^2 from both sides : $a^2 - b^2 = ab - b^2$

$$a^2 - b^2 = ab - b^2$$

Factorize :
$$(a-b)(a+b) = b(a-b)$$

Divide by (a - b): a + b = b

$$a + b = b$$

But a = b, therefore b = 2b

$$b=2b$$

Or