Strange Proofs

1

Theorem: 1 = 0 (given that a and b are integers such that a = b + 1)
Proof:
a = b + 1
(a-b)a = (a-b)(b+1)
$a^2 - ab = ab + a - b^2 - b$
$a^2 - ab - a = ab + a - a - b^2 - b$
a(a - b - 1) = b(a - b - 1)
a = b
b + 1 = b
Therefore, 1 = 0

2

Theorem: 0 = 2 (given that a and b are integers such that a = b)
Proof:
a = b
a - b - 2 = a - b - 2
a(a - b - 2) = b(a - b - 2)
$a^2 - ab - 2a = ab - b^2 - 2b$
$a^2 - ab = ab - b^2 - 2b + 2a$
$a^2 - ab = ab + 2a - b^2 - 2b$
a(a - b) = a(b + 2) - b(b + 2)
a(a - b) = (a - b)(b + 2)

a = b + 2
b = b + 2
Therefore, 0 = 2

3

Theorem: 4 = 5
Proof:
-20 = -20
16 - 36 = 25 - 45
4^2 - 9*4 = 5^2 - 9*5
4^2 - 9*4 + 81/4 = 5^2 - 9*5 + 81/4
(4 - 9/2)^2 = (5 - 9/2)^2
4 - 9/2 = 5 - 9/2
4 = 5

4

Theorem: 3 = 4
Proof:
Suppose that a + b = c then
this can also be written as:
4a - 3a + 4b - 3b = 4c - 3c
After reorganizing:
4a + 4b - 4c = 3a + 3b - 3c
Take the constants out of the brackets:
4 * (a+b-c) = 3 * (a+b-c)
Removing the same term, (a+b-c), gives:
4 = 3

Theorem: All numbers are equal to zero.
Proof:
Suppose that a = b. then
a = b
a^2 = ab
a^2 - b^2 = ab - b^2
(a + b)(a - b) = b(a - b)
a + b = b
a = 0
Furthermore if a + b = b, and a = b, then b + b = b, and 2b = b, which mean that 2 = 1.

5

Theorem: n + n = 2 for any n
Proof:
n(2n - 2) = n(2n - 2)
n(2n - 2) - n(2n - 2) = 0
(n - n)(2n - 2) = 0
2n(n - n) - 2(n - n) = 0
2n - 2 = 0
2n = 2
n + n = 2
ex) let n = 3
then 3 + 3 = 2

6

Theorem: 1$ = 10 cent
Proof:
We know that $1 = 100 cents
Divide both sides by 100
$ 1/100 = 100/100 cents
=> $ 1/100 = 1 cent
Take square root both side
=> $\sqrt{(\$1/100)} = \sqrt{1\text{ cent}}$
=> $ 1/10 = 1 cent
Multiply both side by 10
=> $1 = 10 cent

7

Theorem: 1$ = 1cent.
Proof:
.1$ = 100cents
= (10cents)^2
= (0.1$)^2
= 0.01$
= 1cent