$$a^x + y \neq a^{x+y} \tag{1}$$

$$a^2 = b^3 + c^4 (2)$$

$$a^3 = \sqrt{b} + \sqrt[4]{c} \tag{3}$$

$$a^3 = \sqrt[4]{b} + \frac{3}{c^2} \tag{4}$$

$$a \notin b$$
 (5)

$$a \notin b$$

$$x^{y^{z^w}} = (1 + e^x)^{-2xy^w}$$

$$(5)$$