

1)

$$a = 10$$

$$b = 2$$

$$c = 1$$

$$x = a^b + 1$$

$$x = 10^2 + 1$$

$$x = 101$$

2) $x = a * b + 1$

$$x = 10 * 2 + 1$$

$$x = 20 + 1$$

$$x = 21$$

3) $x = (a * b + 1) \leq 9$

$$x = (10 * 2 + 1) \leq 9$$

$$x = (21) \leq 9$$

4) $x = (a * b + 1) \leq 9$ and true or false.

$$x = (21) \leq 9$$

$$x = \text{False}$$

5) $x = 10 * 2 + 1 * 10 * -1$

$$x = 20 + 10 - 10$$

$$x = 20 - 10$$

$$x = 10$$

6)

$a = \text{False}$

$b = \text{True}$

$c = \text{False}$

$x \leftarrow a \text{ or } b \text{ and } c$

$x = \text{False or True and False}$

$x = \text{True and False}$

$x = \text{False}$

7

$x = (10 \times 1 - 2 \wedge 2) > 10 \text{ and not } (a \text{ or } b \text{ and } c)$

$x = (10 - 4) > 10 \text{ and not } (\text{False})$

$x \leftarrow (6 > 10) \text{ and not False}$

$x = \text{False and True}$

$x = \text{False}$

8

$a = \text{True}$

$b = \text{False}$

$x = ((a \neq b) \text{ or } (a \leq b))$

$x = ((\text{True} \neq \text{False}) \text{ or } (\text{True} \leq \text{False}))$

$x = \text{True or False}$

$x = \text{True}$

9) $x = 20 - 40 \text{ DIV } (10 \times (4 \text{ DIV } 2))$

$x = 20 - 40 \text{ DIV } (10 \times 2)$

$x = 20 - 40 \text{ DIV } 20$

$x = 20 + 0 = 20$