

07. Se $7^{5y} = 243$, o valor de 7^{-y} é:

(A) 1 $7^{5y} = 243$

3

$(7^y)^5 = 3^5$

(B) 1

$7^y = 3$

6

$7^{-y} = \frac{1}{7^y}$

(C) 1

7^y

15

$7 = \frac{1}{7^{-y}}$

(D) 1

3

30

(E) 1

3

08. (MACK) Se $5^x = m$ e $5^y = n$, $(0,04)^{-x+2y}$ vale

(A) $m^{-2} \cdot n^{-4}$

1

$= 25^{x-y} \Rightarrow 5^{2(x-y)} \Rightarrow$

(B) $m^{1/2} \cdot n^{-4}$

$0,04^{-x+2y}$

(C) $m^2 \cdot n^{-1/4}$

(D) $m^{-2} \cdot n^4$

$(5^{2x}) \cdot (5^{-4y})$

$= m^2 \cdot n^{-4}$

(E) $m^2 \cdot n^{-4}$

09. (UEL) Se x e y são números reais, então

(A) $(3^x)^y = 3x^y$

(B) $(2^x \cdot 3^y)^2 = 2^{2x} \cdot 3^{2y}$

(C) $(2^x - 3^x)^y = 2^{xy} - 3^{xy} = -1^{xy}$

(D) $5^x + 3^x = 8^x$

(E) $3 \cdot 2^x = 6^x$