

Evaluating Exponential Functions

A) Evaluate each function at the specified value.

1) $f(x) = 9^{(x-9)} - x; x = 10$

2) $f(x) = 8 \cdot (-2)^{(-1-x)} - 3x; x = 2$

3) $f(x) = -12 + 7^{(2x+10)}; x = -4$

4) $f(x) = x - 10^{-2x}; x = -1$

B) Evaluate each function.

1) If $f(x) = 10 \cdot 4^{-x} - 11$, find $f(-2)$.

2) If $f(x) = 4^{(x-2)} + 1$, find $f(3)$.

3) If $f(x) = 13 \cdot (-5)^{(9+x)}$, find $f(-8)$.

4) If $f(x) = -7 + (-1)^{(-x-3)}$, find $f(-5)$.

C) What is the value of $f(0)$ if $f(x) = (-6)^{(2-5x)} + x$?

i) 36

ii) -12

iii) -36

iv) 12