Name : _____

Missing Base or Exponent

Find the value of x.

1) $4^x = 1{,}024$

$x =$ _____

2) $x^2 = 81$

$x =$ _____

3) $-216 = (-6)^x$

$x =$ _____

4) $x^4 = 256$

$x =$ _____

5) $49 = 7^x$

$x =$ _____

6) $x^5 = 3{,}125$

$x =$ _____

7) $128 = 2^{-x}$

$x =$ _____

8) $8^x = 4{,}096$

$x =$ _____

9) $(-3)^{-x} = -27$

$x =$ _____

10) $64 = x^6$

$x =$ _____

11) $6^{-x} = 7{,}776$

$x =$ _____

12) $(-x)^4 = 2{,}401$

$x =$ _____

13) For what positive value of x, $625 = x^4$?

$x =$ _____

14) What is the value of x, if $(-8)^x = -512$?

$x =$ _____

15) If $5^x = 125$, then which of these can be the value of x?

   i)   5   ii)   3   iii)   4   iv)   −4