

Name : _____

Missing Base or Exponent

Integers: S2

Find the value of x .

1) $x^6 = 729$

$x =$ _____

2) $-512 = (-2)^x$

$x =$ _____

3) $x^4 = 1,296$

$x =$ _____

4) $4^x = 16$

$x =$ _____

5) $x^3 = 216$

6) $-125 = (-5)^x$

$x =$ _____

7) $25 = x^2$

$x =$ _____

$256 = x^8$

$x =$ _____

10) $2,187 = 3^{-x}$

$x =$ _____

$7^{-x} = 343$

$x =$ _____

13) For what negative value of x , if $9 = 3^x$?

$x =$ _____

$x =$ _____

15) If $81 = x^4$, then which of these can be the value of x ?

i) 2 or -2

ii) 4 or -4

iii) 3 or -3

iv) 6 or -6

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1) $x^6 = 729$

$x =$ 3 or -3

2) $-512 = (-2)^x$

$x =$ 9

3) $x^4 = 1,296$

$x =$ 6 or -6

4) $4^x = 16$

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6) $-125 = (-5)^x$

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7) $25 = x^2$

$x =$ 5 or -5

$256 = x^8$

$x =$ 2 or -2

10) $2,187 = 3^{-x}$

$x =$ -7

$7^{-x} = 343$

$x =$ -3

13) For what negative value of x , if $9 = 3^x$?

$x =$ -4

$x =$ 2

15) If $81 = x^4$, then which of these can be the value of x ?

i) 2 or -2

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iv) 6 or -6