

Base and Exponent

Find the value of x .

1) $1,024 = 2^x$

$x =$ _____

2) $x^2 = 25$

$x =$ _____

3) $64 = 8^x$

$x =$ _____

4) $5^x = 125$

$x =$ _____

5) $225 = x^2$

$x =$ _____

6) $81 = 3^x$

$x =$ _____

7) $x^3 = 216$

$x =$ _____

8) $10^x = 1,000$

$x =$ _____

9) $256 = 4^x$

$x =$ _____

10) $169 = 13^x$

$x =$ _____

11) $2^x = 256$

$x =$ _____

12) $x^6 = 729$

$x =$ _____

Base and Exponent

Answer key

Find the value of x .

1) $1,024 = 2^x$

$x =$ 10

2) $x^2 = 25$

$x =$ 5

3) $64 = 8^x$

$x =$ 2

4) $5^x = 125$

$x =$ 3

5) $225 = x^2$

$x =$ 15

6) $81 = 3^x$

$x =$ 4

7) $x^3 = 216$

$x =$ 6

8) $10^x = 1,000$

$x =$ 3

9) $256 = 4^x$

$x =$ 4

10) $169 = 13^x$

$x =$ 2

11) $2^x = 256$

$x =$ 8

12) $x^6 = 729$

$x =$ 3