

Exponents

Name: _____

Date: _____

Find the value of x to balance the equation.

1

$$x^2 = 81$$
$$x = \underline{\hspace{2cm}}$$

2

$$512 = 8^x$$
$$x = \underline{\hspace{2cm}}$$

3

$$1331 = x^3$$
$$x = \underline{\hspace{2cm}}$$

4

$$1728 = 12^x$$
$$x = \underline{\hspace{2cm}}$$

5

$$x^4 = 625$$
$$x = \underline{\hspace{2cm}}$$

6

$$2401 = x^4$$
$$x = \underline{\hspace{2cm}}$$

7

$$144 = x^2$$
$$x = \underline{\hspace{2cm}}$$

8

$$x^3 = 343$$
$$x = \underline{\hspace{2cm}}$$

9

$$1296 = 6^x$$
$$x = \underline{\hspace{2cm}}$$

10

$$125 = 5^x$$
$$x = \underline{\hspace{2cm}}$$

11

$$10000 = x^4$$
$$x = \underline{\hspace{2cm}}$$

12

$$x^5 = 3125$$
$$x = \underline{\hspace{2cm}}$$

13

$$729 = x^6$$
$$x = \underline{\hspace{2cm}}$$

14

$$x^5 = 1024$$
$$x = \underline{\hspace{2cm}}$$

15

$$2187 = 3^x$$
$$x = \underline{\hspace{2cm}}$$

16

$$x^5 = 243$$
$$x = \underline{\hspace{2cm}}$$

17

$$15625 = 5^x$$
$$x = \underline{\hspace{2cm}}$$

18

$$128 = x^7$$
$$x = \underline{\hspace{2cm}}$$

Exponents

Name: _____

Date: _____

Find the value of x to balance the equation.

1

$$x^2 = 81$$
$$x = \underline{\quad 9 \quad}$$

2

$$512 = 8^x$$
$$x = \underline{\quad 3 \quad}$$

3

$$1331 = x^3$$
$$x = \underline{\quad 11 \quad}$$

4

$$1728 = 12^x$$
$$x = \underline{\quad 3 \quad}$$

5

$$x^4 = 625$$
$$x = \underline{\quad 5 \quad}$$

6

$$2401 = x^4$$
$$x = \underline{\quad 7 \quad}$$

7

$$144 = x^2$$
$$x = \underline{\quad 12 \quad}$$

8

$$x^3 = 343$$
$$x = \underline{\quad 7 \quad}$$

9

$$1296 = 6^x$$
$$x = \underline{\quad 4 \quad}$$

10

$$125 = 5^x$$
$$x = \underline{\quad 3 \quad}$$

11

$$10000 = x^4$$
$$x = \underline{\quad 10 \quad}$$

12

$$x^5 = 3125$$
$$x = \underline{\quad 5 \quad}$$

13

$$729 = x^6$$
$$x = \underline{\quad 3 \quad}$$

14

$$x^5 = 1024$$
$$x = \underline{\quad 4 \quad}$$

15

$$2187 = 3^x$$
$$x = \underline{\quad 7 \quad}$$

16

$$x^5 = 243$$
$$x = \underline{\quad 3 \quad}$$

17

$$15625 = 5^x$$
$$x = \underline{\quad 6 \quad}$$

18

$$128 = x^7$$
$$x = \underline{\quad 2 \quad}$$