

# Exponents

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Find the value of x to balance the equation.

1

$$x^3 = 27000$$
$$x = \underline{\hspace{2cm}}$$

2

$$59049 = 9^x$$
$$x = \underline{\hspace{2cm}}$$

3

$$1024 = x^{10}$$
$$x = \underline{\hspace{2cm}}$$

4

$$19683 = 27^x$$
$$x = \underline{\hspace{2cm}}$$

5

$$x^7 = 2187$$
$$x = \underline{\hspace{2cm}}$$

6

$$5832 = x^3$$
$$x = \underline{\hspace{2cm}}$$

7

$$83521 = x^4$$
$$x = \underline{\hspace{2cm}}$$

8

$$x^6 = 262144$$
$$x = \underline{\hspace{2cm}}$$

9

$$729 = 3^x$$
$$x = \underline{\hspace{2cm}}$$

10

$$14641 = 11^x$$
$$x = \underline{\hspace{2cm}}$$

11

$$6561 = x^4$$
$$x = \underline{\hspace{2cm}}$$

12

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

13

$$32768 = x^5$$
$$x = \underline{\hspace{2cm}}$$

14

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

15

$$7776 = 6^x$$
$$x = \underline{\hspace{2cm}}$$

16

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

17

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

18

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

# Exponents

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Find the value of x to balance the equation.

1

$$x^3 = 27000$$
$$x = \underline{30}$$

2

$$59049 = 9^x$$
$$x = \underline{5}$$

3

$$1024 = x^{10}$$
$$x = \underline{2}$$

4

$$19683 = 27^x$$
$$x = \underline{3}$$

5

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

6

$$5832 = x^3$$
$$x = \underline{18}$$

7

$$83521 = x^4$$
$$x = \underline{17}$$

8

$$x^6 = 262144$$
$$x = \underline{8}$$

9

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

10

$$14641 = 11^x$$
$$x = \underline{4}$$

11

$$6561 = x^4$$
$$x = \underline{9}$$

12

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

13

$$32768 = x^5$$
$$x = \underline{8}$$

14

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

15

$$7776 = 6^x$$
$$x = \underline{5}$$

16

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

17

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

18

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