

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

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

# Exponents

$(-2)^4$ ↓ The base is -2. $(-2)(-2)(-2)(-2) = 16$ <small>www.worksheetsdirect.com</small>	<u>vs.</u>	$-2^4$ ↓ The base is 2. $-(2 \cdot 2 \cdot 2 \cdot 2) = -16$ The opposite of....
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Evaluate each expression when  $x = 3$ .

1.  $-(x)^2 =$  \_\_\_\_\_ 2.  $x^2 =$  \_\_\_\_\_

3.  $-(x)^1 =$  \_\_\_\_\_ 4.  $x^1 =$  \_\_\_\_\_

Evaluate each expression when  $x = -4$ .

5.  $-(x)^2 =$  \_\_\_\_\_ 6.  $x^3 =$  \_\_\_\_\_

7.  $x^2 =$  \_\_\_\_\_ 8.  $-(x)^3 =$  \_\_\_\_\_

Evaluate each expression when  $x = 9$ .

9.  $-(x)^2 =$  \_\_\_\_\_ 10.  $-(x)^3 =$  \_\_\_\_\_

11.  $x^3 =$  \_\_\_\_\_ 12.  $=$  \_\_\_\_\_

Evaluate each expression when  $x = -10$ .

13.  $x^3 =$  \_\_\_\_\_ 14.  $x^1 =$  \_\_\_\_\_

15.  $x^2 =$  \_\_\_\_\_ 16.  $-(x)^3 =$  \_\_\_\_\_

# Exponents

$(-2)^4$ <p style="text-align: center;">↓</p> <p style="text-align: center;">The base is -2.</p> $(-2)(-2)(-2)(-2) = 16$ <p style="text-align: center;"><small>www.worksheetsdirect.com</small></p>	vs.	$-2^4$ <p style="text-align: center;">↓</p> <p style="text-align: center;">The base is 2.</p> $-(2 \cdot 2 \cdot 2 \cdot 2) = -16$ <p style="text-align: center;">The opposite of....</p>
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Evaluate each expression when  $x = 3$ .

1.  $-(x)^2 = -9$  \_\_\_\_\_

2.  $x^2 = 9$  \_\_\_\_\_

3.  $-(x)^1 = -3$  \_\_\_\_\_

4.  $x^1 = 3$  \_\_\_\_\_

Evaluate each expression when  $x = -4$ .

5.  $-(x)^2 = -16$  \_\_\_\_\_

6.  $x^3 = -64$  \_\_\_\_\_

7.  $x^2 = 16$  \_\_\_\_\_

8.  $-(x)^3 = 64$  \_\_\_\_\_

Evaluate each expression when  $x = 9$ .

9.  $-(x)^2 = -81$  \_\_\_\_\_

10.  $-(x)^3 = -729$  \_\_\_\_\_

11.  $x^3 = 729$  \_\_\_\_\_

12.  $= -81$  \_\_\_\_\_

Evaluate each expression when  $x = -10$ .

13.  $x^3 = -1,000$  \_\_\_\_\_

14.  $x^1 = -10$  \_\_\_\_\_

15.  $x^2 = 100$  \_\_\_\_\_

16.  $-(x)^3 = 1,000$  \_\_\_\_\_