

NAME \_\_\_\_\_

**Module 1** Getting Ready for Algebra  
**Lesson 4** Simplifying Expressions with Exponents and Roots



guided  
practice

**Set 1**  
Simplify.

1.  $2^3 =$

8

2.  $4^4 =$

256

3.  $\left(\frac{2}{3}\right)^3 =$

 $\frac{8}{27}$ 

4.  $1^4 =$

1

**Set 2**

1. Determine the sign of  $(-3)^3$ , then simplify.

- The sign will be negative.

- $(-3)^3 = -27$

2. Determine the sign of  $\left(-\frac{1}{2}\right)^4$ , then simplify.

- The sign will be positive.

- $\left(-\frac{1}{2}\right)^4 = \frac{1}{16}$

3. Determine the sign of  $(-5)^4$ , then simplify.

- The sign will be positive.

- $(-5)^4 = 625$

4. Determine the sign of  $(-3)^5$ , then simplify.

- The sign will be negative.

- $(-3)^5 = -243$

**Set 3**  
Simplify.

1.  $\sqrt{81} =$

9

2.  $\sqrt[3]{125} =$

5

3.  $\sqrt[3]{-\frac{1}{8}} =$

 $-\frac{1}{2}$ 

4.  $\sqrt{169} =$

13

