



Writing Expressions using Exponents

Grade 6 Exponents Worksheet

Date: _____

Name: _____

LET'S MAKE LEARNING FUN

Write the following expressions using exponents.

Example 1: Write this expression using exponents

$$3 \times 3 \times 3 \times 3 \times 3 = 3^5$$

That is,

$3 \times 3 \times 3 \times 3 \times 3$ is written as 3^5 .

- $3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 =$ _____
- $8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 =$ _____
- $43 \times 43 \times 43 \times 43 \times 43 =$ _____
- $(-1) \times (-1) \times (-1) \times (-1) \times (-1) \times (-1) =$ _____
- $\left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) =$ _____
- $1.7 \times 1.7 \times 1.7 \times 1.7 \times 1.7 \times 1.7 =$ _____
- $\frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} =$ _____
- $13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 =$ _____
- $7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 =$ _____
- $56 \times 56 \times 56 \times 56 \times 56 \times 56 \times 56 \times 56 =$ _____
- $(-0.012) \times (-0.012) \times (-0.012) \times (-0.012) \times (-0.012) =$ _____
- $\left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) =$ _____

Writing Expressions using Exponents

Grade 6 Exponents Answer sheet

1. $3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 \times 3.75 = \underline{(3.75)^9}$

2. $8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 \times 8.2 = \underline{(8.2)^9}$

3. $43 \times 43 \times 43 \times 43 \times 43 = \underline{(43)^5}$

4. $(-1) \times (-1) \times (-1) \times (-1) \times (-1) \times (-1) = \underline{(-1)^6}$

5. $\left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) \times \left(\frac{1}{8}\right) = \underline{\left(\frac{1}{8}\right)^8}$

6. $1.7 \times 1.7 \times 1.7 \times 1.7 \times 1.7 \times 1.7 = \underline{(1.7)^6}$

7. $\frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} \times \frac{15}{6} = \underline{\left(\frac{15}{6}\right)^7}$

8. $13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 = \underline{(13)^{12}}$

9. $7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 = \underline{7^9}$

10. $56 \times 56 \times 56 \times 56 \times 56 \times 56 \times 56 \times 56 = \underline{(56)^8}$

11. $(-0.012) \times (-0.012) \times (-0.012) \times (-0.012) \times (-0.012) = \underline{(-0.012)^5}$

12. $\left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) \times \left(-\frac{5}{17}\right) = \underline{\left(-\frac{5}{17}\right)^7}$