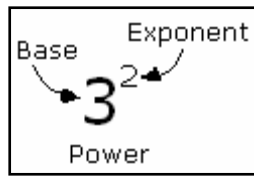


CHAPTER 3 Polynomials
3.2 Work With Exponents
Powers as Repeated Multiplication



Example:

a) Write as a power: $5 \times 5 \times 5 \times 5 \times 5 \times 5$

b) Write in expanded form: 8^3

Solution:

a) The base is 5. There are six factors.

$$5 \times 5 \times 5 \times 5 \times 5 \times 5 = 5^6$$

b) The base is 8. There are three factors.

$$8^3 = 8 \times 8 \times 8$$

Practice:

1. Write as a power: $1.5 \times 1.5 \times 1.5 \times 1.5 \times 1.5 \times 1.5 \times 1.5 \times 1.5$

2. Write in expanded form: 0.3^4

Answers:

1. 1.5^8 2. $0.3 \times 0.3 \times 0.3 \times 0.3$