

I. Definitions

$$4 + 4 + 4 + 4 + 4 =$$

The center dot indicates
_____.

The _____ tells how
many times the _____ is
used as a factor.

$$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 = \underline{\quad} =$$

Common factors

The _____ is the common factor.

Numbers expressed using exponents are called _____.

Symbols	Words
5^2	five to the second power or five squared
4^3	four to the third power or four cubed
3^4	Three to the fourth power

II. Write Powers As A Product Of The Same Factor.

$$3^5$$

To write powers as a product
of the same factor:

$$2^6$$

$$15^2$$

$$4. \quad 3^3$$

$$5. \quad 6^4$$

III. Write Powers in Standard Form

Evaluate each expression

$$2^6$$

$$15^2$$

8. 3^3

9. 6^4

To evaluate **exponential expressions**

Standard Form:

Exponential Form:

$$4^1 =$$

When a number does not have an exponent, it is understood to be 1.

IV. Write Numbers in exponential Form

$$(3)(3)(3)(3) =$$

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 =$$

10. $6 \cdot 6 \cdot 6 =$

11. $(9)(9)(9)(9) =$

V. Evaluate algebraic expressions with exponents

Evaluate each algebraic expression when a = 4, b=2, and c=3

a^2

b^c

12. b^a

13. a^b

VI. Practice

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