

## Grade 7 Exam-Style Math Worksheet

### Topics: Order of Operations (BIDMAS) and Index Notation

#### Section 1: Order of Operations (BIDMAS)

Simplify the following expressions. Show all working:

- a)  $6 + 3 \times 5$
- b)  $(8 + 4) \div 2$
- c)  $7 \times (2 + 6) - 5$

Insert parentheses to make each equation true:

- a)  $7 + 2 \times 5 - 3 = 16$
- b)  $9 + 3 \times 4 - 5 = 26$
- c)  $6 + 4 \times 3 - 2 = 18$

Solve the following:

- a)  $(5 + 4^2) \div 3 + 2$
- b)  $7 + (3^3 \times 2)$
- c)  $15 \div (5 + 2^2)$

Word Problem:

A delivery truck carries 6 crates of oranges. Each crate holds 12 oranges. The driver delivers 20 oranges. Write an expression to represent how many oranges are left and calculate the answer.

#### Section 2: Index Notation

Write the following using index notation:

- a)  $6 \times 6 \times 6 \times 6 =$
- b)  $8 \times 8 \times 8 =$
- c)  $3 \times 3 \times 3 \times 3 \times 3 =$

Simplify the following:

- a)  $5^3 =$
- b)  $7^2 =$
- c)  $4^4 =$

Word Problem:

A square field measures 25 meters by 25 meters. Express its area using index notation and calculate the result.

Evaluate the following:

- a)  $(3^2 + 5) \times 4 =$
- b)  $12 - 2^3 + (8 \div 2) =$
- c)  $(6 + 2^4) \times 3 =$
- d)  $24 \div (3^2 + 3) =$