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BIDMAS Practice Worksheet

Introduction to BIDMAS

BIDMAS stands for Brackets, Indices, Division, Multiplication, Addition, and Subtraction. It is the order in which you should solve mathematical expressions to get the correct answer.

- **B**: Brackets
- I: Indices (powers or roots)
- **D**: Division
- **M**: Multiplication
- **A**: Addition
- **S**: Subtraction

Remember: Always work out anything in brackets first, then indices, followed by division and multiplication (from left to right), and finally addition and subtraction (from left to right).

Multiple Choice Questions

1. What is the answer to the expression: $3 + 4 \times 10^{-2}$	< 2?
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- a) 14
- b) 11
- c) 10
- d) 7
- 2. Which operation should you perform first in the expression: $6 + (2 \times 5)$?
- a) Addition
- b) Multiplication
- c) Brackets
- d) Subtraction
- 3. What is the value of $2^3 + 5$?
- a) 16
- b) 13
- c) 11
- d) 10

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- 4. What is the answer to $18 \div 3 2$?
- a) 4
- b) 12
- c) 6
- d)8

Fill in the Blank Questions

- 1. In the expression $7 + 3 \times (2 + 1)$, you should solve the _____ first.
- 2. 5^2 means 5 ____ by 5.
- 3. In $12 4 \div 2$, you must do the _____ before the subtraction.
- 4. $8 + 2 \times 4 =$

True/False Questions

- 1. True or False: In BIDMAS, addition comes before multiplication.
- 2. True or False: $4 \times (3 + 2)$ equals 20.
- 3. True or False: $10 2 \times 3 = 24$.
- 4. True or False: The answer to $2 + 3 \times 4$ is 20.

Short Answer Questions

- 1. Explain why $2 + 3 \times 4$ is not the same as $(2 + 3) \times 4$.
- 2. Write an expression using all parts of BIDMAS (Brackets, Indices, Division, Multiplication, Addition, Subtraction) and solve it.

Challenge Question

1. Calculate the value of $[(6 + 2) \times 3^2] \div 6$.

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Answer Key

Multiple Choice Answers

- 1. b) 11
- 2. c) Brackets
- 3. b) 13
- 4. a) 4

Fill in the Blank Answers

- 1. brackets
- 2. multiplied
- 3. division
- 4. 16

True/False Answers

- 1. False Multiplication comes before addition in BIDMAS.
- 2. True
- 3. False $-10 2 \times 3 = 4$, not 24.
- 4. False $-2 + 3 \times 4 = 14$, not 20.

Short Answer Answers

- 1. Because in $2 + 3 \times 4$, multiplication is done before addition, but with brackets, addition is done first.
- 2. Example: $[(8+4) \div 2]^2 3 = [(12 \div 2)]^2 3 = [6]^2 3 = 36 3 = 33$

Challenge Question Answer

1.
$$[(6+2) \times 3^2] \div 6 = [8 \times 9] \div 6 = 72 \div 6 = 12$$