

## Order of Operations

**P**arentheses **E**xponents **M**ultiply **D**ivide **A**dd **S**ubtract

Follow the "Order of Operations" in the order shown above, starting with the parentheses.

*Note: If the expression only contains addition and subtraction or multiplication and division, then evaluate the expression from left to right.*

Directions: Evaluate each expression.

1.  $16 - 3 \cdot 4$  **PEMDAS**  
 $16 - 12 = \boxed{4}$

2.  $11 + 5 - 2 + 6$  **PEMDAS**  
 $16 - 2 + 6$   
 $14 + 6 = \boxed{20}$

3.  $24 \div 8 \times 7 \div 3$  **PEMDAS**  
 $3 \times 7 \div 3$   
 $21 \div 3 = \boxed{7}$

4.  $5 \cdot 6 + 7 \cdot 11$  **PEMDAS**  
 $30 + 77 = \boxed{107}$

5.  $\frac{14 + 22}{(12 \div 4)^2}$  **PEMDAS**  
 $\frac{14 + 22}{3^2} = \frac{(14 + 22)}{9} = \frac{36}{9}$   
 $= \boxed{4}$

6.  $18 - (8^2 - 100 \div 2)$  **PEMDAS**  
 $18 - (64 - 100 \div 2)$   
 $18 - (64 - 50)$   
 $18 - 14 = \boxed{4}$

7.  $4[15-(2+6)]$  PEMDAS

$4[15-8]$

$4[7]$

$4 \cdot 7 = \boxed{28}$

8.  $(7+3)^2 + 2$  PEMDAS

$10^2 + 2$

$100 + 2 = \boxed{102}$

9.  $[(24-16) \div 2]^2$  PEMDAS

$[8 \div 2]^2$

$[4]^2 = \boxed{16}$

10.  $(90 \div 15 + 7^2) \div 11$  PEMDAS

$(90 \div 15 + 49) \div 11$

$(6 + 49) \div 11$

$55 \div 11 = \boxed{5}$