

## ORDER OF OPERATIONS - A

## ANSWERS - PAGE 1

ORDER OF OPERATIONS	
1. PARENTHESES ( )	↓
2. EXPONENTS $3^2 = 3 \times 3$	
3. MULTIPLICATION AND DIVISION $\times \div$	
4. ADDITION AND SUBTRACTION $+$ $-$	

### HELPFUL EXAMPLE

$$5 + 3 \times 2$$

$$5 + 6$$

$$11$$

LOOK AT THE LIST ON THE LEFT. WE HAVE TO MULTIPLY BEFORE WE ADD.

ANSWER: 11

USE THE ORDER OF OPERATIONS TO SOLVE EACH PROBLEM.

1.  $6 - 8 \div 2$       2.  $1 \times 2 + 4$       3.  $9 \div 3 + 5$

$$6 - 4 = 2$$

$$2 + 4 = 6$$

$$9 \div 3 = 3$$

$$3 + 5 = 8$$

4.  $3 + 0 \times 6$       5.  $10 \div 2 - 4$       6.  $2 \times 8 - 6$

$$3 + 0 = 3$$

$$10 \div 2 = 5$$

$$5 - 4 = 1$$

$$2 \times 8 = 16$$

$$16 - 6 = 10$$

7.  $8 - 4 \div 2$       8.  $3 \times 4 - 2$       9.  $5 + 3 \times 7$

$$8 - 2 = 6$$

$$3 \times 4 = 12$$

$$12 - 2 = 10$$

$$5 + 21 = 26$$

LOOK AT THE LIST. DO PARENTHESES FIRST.

10.  $(7 - 4) \times 5$       11.  $3 \times (2 + 6)$       12.  $(5 + 5) \div 5$

$$(3) \times 5 = 15$$

$$3 \times 8 = 24$$

$$10 \div 5 = 2$$

13.  $14 - 10 \div 2$       14.  $(9 - 3) \div 3$       15.  $24 \div 6 - 2$

$$14 - 5 = 9$$

$$(6) \div 3 = 2$$

$$24 \div 6 = 4$$

$$4 - 2 = 2$$

16.  $(7 + 2) \times 4$       17.  $24 \div (6 - 2)$       18.  $7 + 2 \times 4$

$$(9) \times 4 = 36$$

$$24 \div 4 = 6$$

$$7 + 8 = 15$$

## ORDER OF OPERATIONS - B

## ANSWERS - PAGE 2

ORDER OF OPERATIONS	
1. PARENTHESES ( )	
2. EXPONENTS $3^2 = 3 \times 3$	
3. MULTIPLICATION AND DIVISION $\times \div$	
4. ADDITION AND SUBTRACTION $+$ $-$	

### HELPFUL EXAMPLE

$$8 \div 4 \times 2$$

$$2 \times 2$$

$$4$$

WHEN YOU HAVE MULTIPLICATION AND DIVISION WITH NO PARENTHESES YOU SOLVE FROM LEFT TO RIGHT. IT'S LIKE READING A BOOK.

ANSWER: 4

USE THE ORDER OF OPERATIONS TO SOLVE EACH PROBLEM.

1.  $24 \div 6 \times 2$       2.  $9 \times 6 \div 3$       3.  $6 \div 3 \times 9$

$$4 \times 2 = 8$$

$$9 \times 2 = 18$$

$$2 \times 9 = 18$$

PARENTHESES!

4.  $6 \times (8 \div 2)$       5.  $14 \div (2 \times 7)$       6.  $14 \div 2 \times 7$

$$6 \times 4 = 24$$

$$14 \div 14 = 1$$

$$7 \times 7 = 49$$

DO THE SAME FOR ADDITION AND SUBTRACTION.

7.  $20 - 8 + 5$       8.  $18 + 5 - 12$       9.  $31 - 13 + 6$

$$12 + 5 = 17$$

$$18 + 5 = 23$$

$$23 - 12 = 11$$

$$31 - 13 = 18$$

$$18 + 6 = 24$$

10.  $17 + (9 - 4)$       11.  $25 - (8 + 7)$       12.  $25 - 8 + 7$

$$17 + 5 = 22$$

$$25 - 15 = 10$$

$$25 - 8 = 17$$

$$17 + 7 = 24$$

REVIEW.

13.  $5 \times (4 + 7)$       14.  $29 - 9 + 3$       15.  $40 \div (4 \times 2)$

$$5 \times 11 = 55$$

$$29 - 9 = 20$$

$$20 + 3 = 23$$

$$40 \div 8 = 5$$

16.  $32 - 8 \div 4$       17.  $12 \div 6 \times 2$       18.  $18 + (5 - 3)$

$$32 - 2 = 30$$

$$12 \div 6 = 2$$

$$2 \times 2 = 4$$

$$18 + 2 = 20$$