



# Assignment for Whole Numbers

## Question 1

Write the smallest natural and smallest whole number.

# **Question 2**

#### Match the column

| Closure Property        | If a and b are any two whole numbers, then $a+b=b+a$ and $a\times b=b\times a$ .                                    |
|-------------------------|---|
| Commutative property    | If a and b are any two whole numbers, then a+b, axb are also whole numbers.   |
| Associative property    | If a, b and c are any two whole numbers, then $a(b+c) = a \times b + a \times c$ .                                  |
| Distributive property   | If a, b and c are any two whole numbers, then $(a+b)+c = a+(b+c)$ and $(a\times b)\times c = a\times (b\times c)$ . |
| Additive Identity       | If a is any whole number, then $a + 0$<br>= $a = 0 + a$ .   |
| Multiplicative Identity | If a is any whole number, then a $\times$ 0   |

This material is created by <a href="http://physicscatalyst.com/">http://physicscatalyst.com/</a> and is for your personal and non-commercial use only.



|                        | $= 0 = 0 \times a.$  |
|------------------------|--|
| Multiplication by zero | If a is any whole number, then a $\times$ 1 = a = 1 $\times$ a |
| Division by zero       | If a is any whole number, then a ÷ 0 is not defined            |

# Question

# Match the column

| 191 +13 =13 +191                                      | Associative Property of                 |
|---|---|
|   | Multiplication.                         |
| 90 +0 =00   | Distributive Property of Multiplication |
|   | over Addition.                          |
| (78 + 1) + 11 = 78 + (1 + 11)                         | Commutative Property of                 |
|   | Multiplication                          |
| $(121 \times 4) \times 80 = 121 \times (4 \times 80)$ | Distributive Property of Multiplication |
|   | over Subtraction.                       |
| $12 \times (10 + 85) = 12 \times 10 + 12 \times 85$   | Associative Property of Addition        |
| $71x (11 - 3) = 71 \times 11 - 71 \times 3$           | Additive Identity                       |
| $10 \times 45 = 45 \times 10$                         | Commutative Property of Addition.       |



### **Question 4**

#### Fill in the blanks

| (a)     | × 13 = 13 ×      | 18                        |             |                 |
|---------|------------------|---------------------------|-------------|-----------------|
| (b) Wł  | nole numbers are | e closed under            | _ and       | operation.      |
| (c) Div | ision by         | is not defined.           |             |                 |
| (d)     | is the ide       | ntity for multiplication. |             |                 |
| (e) If  | is added         | to a number, the sum      | will remain | the same. Hence |
|         | is called the    | in the whole              | numbers.    |                 |

## **Question 5**

How many whole numbers are there between 12 and 86

## **Question 6**

Find the product using Distributive property

(a)  $168 \times 102$ 

(b) 625 × 279 - 625 × 79

## **Question 7**

Find the successor and predecessor of each of the following whole numbers:

- (i) 999
- (ii) 21999
- (iii) 4001
- (iv) 500012
- (v) 11111

#### **Question 8**

Seema got 99 marks in Math, 69 marks in English, and 91 in Science. Another student Rita got 92 marks in Math, 33 in English and 84 in Science. What are their total marks?

This material is created by <a href="http://physicscatalyst.com/">http://physicscatalyst.com/</a> and is for your personal and non-commercial use only.

[4



## **Question 9**

Ramesh ordered 10 cartons of chocolates to distribute among the class. Each carton holds 20 boxes and each box has 12 chocolates. How many chocolates did Ramesh order altogether?

#### **Question 10**

Mukesh lives form a hostel which charges Rs 55 for Dinner and 45 for Lunch. Find the money he has to pay for seven days.

#### **Answer**

#### 1

The smallest natural number is 1

The smallest whole number is 0.

#### 2.

| Closure Property     | If a and b are any two whole numbers, then a+b, axb are also whole numbers.   |  |
|----------------------|---|--|
| Commutative property | If a and b are any two whole numbers, then $a+b=b+a$ and $a\times b=b\times a$ .                                    |  |
| Associative property | If a, b and c are any two whole numbers, then $(a+b)+c = a+(b+c)$ and $(a\times b)\times c = a\times (b\times c)$ . |  |

This material is created by <a href="http://physicscatalyst.com/">http://physicscatalyst.com/</a> and is for your personal and non-commercial use only.



| Distributive property   | If a, b and c are any two whole numbers, then $a(b+c) = a \times b + a \times c$ . |
|-------------------------|--|
| Additive Identity       | If a is any whole number, then $a + 0$<br>= $a = 0 + a$ .                          |
| Multiplicative Identity | If a is any whole number, then a $\times$ 1 = a = 1 $\times$ a                     |
| Multiplication by zero  | If a is any whole number, then $a \times 0$<br>= $0 = 0 \times a$ .                |
| Division by zero        | If a is any whole number, then a ÷ 0 is not defined                                |

# 3.

| 191 +13 =13 +191                                      | Commutative Property of Addition                          |
|---|---|
| 90 +0 =00   | Additive Identity   |
| (78 + 1) + 11 = 78 + (1 + 11)                         | Associative Property of Addition                          |
| $(121 \times 4) \times 80 = 121 \times (4 \times 80)$ | Associative Property of Multiplication.                   |
| $12 \times (10 + 85) = 12 \times 10 + 12 \times 85$   | Distributive Property of Multiplication over Addition.    |
| 71x ( 11 - 3 ) = 71 x 11 - 71 x 3                     | Distributive Property of Multiplication over Subtraction. |
| 10 x 45 = 45 x 10                                     | . Commutative Property of Multiplication                  |



#### 4)

- (a) 18
- (b) Addition and Multiplication.
- (c) 0.
- (d) 1.
- (e) 0, 0, Identity element for Addition.

#### 5) 75

6)

(a) 
$$168 \times 102 = 168 \times (100 + 2) = 16800 + 336 = 17136$$

(b) 
$$625 \times 279 - 625 \times 79 = 625 \times (279-79) = 625 \times 200 = 125000$$

# 8) Marks obtained by Seema:

Math = 99

English = 69

Science = 91

 $\therefore$  Total marks obtained by Seema = 99 + 69 + 91 = 259

Marks obtained by Rita:

Math = 92

English = 32

Science = 84

 $\therefore$  Total marks obtained by John = 92 + 33 + 84 = 209

# 9) 240 chocolates

10) Amount paid for lunch = 45

Amount paid for dinner = 55

Number of days = 7

Money paid by him in 7 days =  $7 \times (55 + 45) = 700$