

PROPERTIES OF INTEGERS WITH RESPECT TO ADDITION

1. Fill the given blanks without actual additions.

- (i)  $25 + 35 = 60$  then  $35 + 25 = \dots\dots\dots$
- (ii)  $105 + 307 = 412$  then  $307 + 105 = \dots\dots\dots$
- (iii)  $605 + 350 = 955$  then  $350 + 605 = \dots\dots\dots$
- (iv)  $(-105) + 70 = -35$  then  $70 + (-105) = \dots\dots\dots$

2. Match the following

- (i)  $45 + (-25) = (-25) + 45$  ( ) (A) Additive Identify
- (ii)  $(-5) + 2025 = 2020$  ( ) (B) Additive Inverse
- (iii)  $(6+7) + (-4) = 6+(7+(-4))$  ( ) (C) Asociative property under addition
- (iv) 3, -3 are called as to ( ) (D) Closure property under addition  
each other
- (v) Zero (0) ( ) (E) Commutative property under addition  
(F) Multiplicative identity.

3. Find the following using by using properties of addition.

- (i)  $25 + 45 + 65$  (ii)  $(-50)+60+(-70)$
- (iii)  $607 + (-705) + (-402)$  (iv)  $(-400) + 35 + (-25)$

4. Find the sum of 2020 and additive identity.

which property that  $25 + (-10) + 25$  represents ? give reasons.

5. Find (i)  $(4000+5000) + 6000$  (ii)  $4000 + (5000 + 6000)$  (iii)  $(4000+6000) + 5000$

What do you observe from the following sums what is the property followed here ?

6. What do you observe from the following sums what is the property followed here ?

7. Find (i)  $309+0$  (ii)  $(-39) + 0$  (iii)  $0 + (-39)$  (iv)  $5 + 0$

Write the name of the property used here .....

8. Find the following (i)  $6 + 1 = \dots\dots\dots$  (ii)  $1 + 6 = \dots\dots\dots$  (iii)  $(-35) + 1 = \dots\dots\dots$

What do you observe (By adding '1' to any integer/number).