

PROPERTIES OF INTEGERS WITH RESPECT TO ADDITION

1. Fill the given blanks without actual additions.

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

2. Match the following

- (i) $45 + (-25) = (-25) + 45$ () (A) Additive Identity
- (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) $6 + 1 = \dots$ (ii) $1 + 6 = \dots$ (iii) $(-35) + 1 = \dots$

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