# 4.Integers

1) **Verify $a-(-b) = a + b$ for the following values of 'a' and 'b'.**

   **(a) a = 75, b = 84**

   **(b) a = 118, b = 125**

   **(c) a= 25, b = 30**

2) **Write down a pair of integers whose**

   **(a) Sum is − 3**

   **(b) Sum is 0**

   **(c) Difference is 2**

   **(d) Difference is − 5**

3) **Verify the following :**

   **a)** $(-21) \times [(-4) + (-6)] = [(-21) \times (-4)] + [(-21) \times (-6)]$

   **b)** $15 \times [6 + (-3)] = [15 \times 6] + [15 \times (-3)]$

   **c)** $(-15) \times [(-8) + (-6)] = [(-15) \times (-8)] + [(-15) \times (-6)]$

4) **Evaluate :**

   **a)** $(-100) \div 5$

   **b)** $(-36) \div (-4)$

   **c)** $(-41) \div [(-40) + (-1)]$

   **d)** $0 \div (-18)$

   **e)** $[(-36) \div 12] \div 3$

   **f)** $(-50) \div (50)$

   **g)** $60 \div (-6)$

   **h)** $(-48) \div -48$

i) $(-13) \div (13)$

5) **Do as directed :**

1. **In a test (+5) marks are given for every correct answer and $(-2)$ marks are given every incorrect answer.**

**(i)** **Radhika answered all the questions and scored 30 marks though she got 10 correct answers.**

**(ii)** **Jay also answered all the questions and scored $(-12)$ marks though he got 4 correct answers. How many incorrect answers had they attempted ?**

6) **In a class test containing 15 questions 4 marks are given for every correct answer and $(-2)$ marks are given for every incorrect answers :**

**i)** **Gurupreet attempts all question but only 9 of her answers are correct. What is her total score ?**

**ii)** **One of her friends gets only 5 answers correct. What will be her score ?**

7) **Write five pairs of integers (a, b) such that $a \div b = -6$.**

8) **Find**

i) $(-3) \times (-6) \times (-2) \times (-1)$

ii) $(-12) \times (-11) \times (10)$

iii) $(-320) \times (-1)$

iv) $(-18) \times 0 \times (-16)$

v) $9 \times (-5) \times (-3)$

vi) $(-41) \times 10$

vii) $(-21) \times (-30)$

viii) $(-1) \times 225$

ix) $(-22) \times (-1)$

x) $(-20) \times (-2) \times (-5) \times 7$

9) Use the sign > , < , =

i) $29 + (-18) - 15$ ☐ $36 - (-15) + 28$

ii) $-241 + 76 + 86$ ☐ $-399 + 163 + 45$

iii) $(-3) + 7 - (-18)$ ☐ $18 - 9 + (-6)$

iv) $(-8) + (-6)$ ☐ $(-8) - (-6)$

v) $(-18) + (18)$ ☐ $(-31) + (31)$

vi) $86 - 45 + 23$ ☐ $-36 - (20) - (-8)$

10) In a quiz, positive marks are given for correct answers and negative marks are given for incorrect answers. If Jack's scores in five successive rounds were 65, $-10, -15, 20, 30$. What was his total score at the end.

11) In a quiz , team A scored $-50, 30, 0$ and team B scored 60, 30, $-40$ in three successive rounds. Which team scored more ?

12) The temperature at 12 noon was $10^0$C above zero. If it decreases at the rate of $2^0$C per hour until midnight, at what time would the temperature be $8^0$C below zero? What would be the temperature at mid – night ?

13) Replace the blank with an integer to make it a true statement.

a) _____ $\times (-12) = -60$

b) $5 \times$ _____ $= -35$

c) $(-8) \times$ _____ $= 72$

d) _____ $\div (-3) = 9$

e) $(-20) \div$ _____ $= 5$

**Answers :**

## 2.Lines & Angles

**1.** **a) $34^0$** **b) $43^0$** **c)$78^0$** **d) $9^0$**

**2.** **a) $45^0$** **b)$93^0$** **c)$141^0$** **d)$68^0$**

**3.** **a) x =$49^0$ y = $131^0$ z = $131^0$**

**b) x =$95^0$ y = $120^0$ z = $60^0$**

**4. a) x = $75^0$ b) x = $110^0$**

### Chapter 3 : Data Handling

**10 )** $\frac{2}{5}$ **11)** $\frac{49}{50}$ **12) (i)** $\frac{1}{2}$ **(ii)** $\frac{1}{3}$ **(iii)** $\frac{1}{3}$ **(iv)** $\frac{1}{2}$ **(v)** $\frac{1}{3}$

### Chapter 4 : Integers

**4) a)** $-20$ $b)\ 9$ **c) 1** **d)0** **e)** $-1$ **f)** $-1$ **g)** $-10$

**h) 1** **i)** $-1$

**5) Sol : (i) 10** **(ii) 16** **6) Sol : (i) 24** **(ii) 0**

**8) (i) 36** **(ii) 1320** **(iii) 320** **(iv) 0** **(v) 135**

**(vi)** $-410$ **(vii) 630** **(viii)** $-225$ **(ix) 22** **(x)** $-1400$

**9) (i) < (ii) > (iii) > (iv) < (v) = (vi) >**

**10) Sol : 90** **11) Sol : Team A Marks − 20**

**Team B Marks 50**

**12) Sol : 9pm ; $-14^0$C**

**13) Sol : a) 5** **b)** $-7$ **c) 9** **d) 27** **e)** $-4$