

INDIAN SCHOOL AL WADI AL KABIR

Class VII, Mathematics (2023-24)

Worksheet DTQ -Integers

| SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each) | | | | | | | |
|--|---|--|--|--|--|--|--|
| Q1. | Sayansh won a cash award of ₹1500. If he gives ₹ 400 for charity, find the amount of money left with him after the donation. | | | | | | |
| Q2. | A building is 18 m high. A monkey can climb 3m in each jump. Find the number of jumps the monkey will make to reach the top of the building. | | | | | | |
| Q3. | Akhil deposits an amount of ₹4500 in his bank account. The next day he withdrew ₹1280 from his account. If the amount withdrawn is represented by a negative integer, how will you represent the amount deposited? Find the amount left in his account after the withdrawal. | | | | | | |
| Q4. | A bird descends at a rate of 10 m /min. If it is 350 m above the ground level, how much time will it take to reach the ground? | | | | | | |
| Q5. | In a Math test, (+2) marks are given for every correct answer and (-1) mark for every incorrect answer. If Zayan gets 12 questions correct out of 18 questions he attended, find Zayan's total score. | | | | | | |
| Q6. | According to the weather report, the temperature at a city increased from (-10°C) to 15°C. Find the increase in temperature. | | | | | | |
| Q7. | Among the given statements, choose the statements which does NOT hold true for integers: a) Multiplication is commutative for integers. b) The multiplicative identity for integers is 0. c) Integers are closed under subtraction. d) The product of two negative integers is negative. | | | | | | |
| | SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each) | | | | | | |
| Q8. | A mercury thermometer records a temperature of 10 °C at 9 am. If the temperature drops by 3 °C after every hour, find the temperature at 2 pm. | | | | | | |
| Q9. | In a class test containing 15 questions, 4 marks are given for every correct answer and (-2) marks are given for every incorrect answer. a) Jyothish attempts all questions but only 9 of his answers are correct. What is his total score? b) Vimal gets 2 incorrect answers when he attempts all the questions. Find his total score. | | | | | | |
| Q10. | On a particular day in December, temperature of Delhi was 15°C and temperature at Shimla was 2°C. On the same day at New York, temperature was recorded as -20°C. Find the difference between the temperatures of i) Delhi and New York. ii) Shimla and New York. | | | | | | |

| Q11. | Fill in the blank space:i) The value of $\{480 \div 12\} \div 4 =$ ii) The value of $(-12) + (-18) + 35$ isiii) $\{(-45) + (-28)\} + 35 = (-45) + \{(\) + 35\}$ | | | | | | | | | |
|------|--|--|--|--|--|--|--|--|--|--|
| Q12. | Solve using suitable property and name the property i) $(-45) \times (-18)$ ii) $26 \times (-25) \times (-4)$ iii) $55 \times 40 + 60 \times 55$ | | | | | | | | | |
| | LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each) | | | | | | | | | |
| Q13. | Competency Based Question (CBQ): The average temperature at the Horizon Glacier is less than 0° C. The maximum and minimum temperature recorded during the 7 days of a week is shown in the table given below. | | | | | | | | | |
| | Sun Mon Tue Wed Thu Fri Sat | | | | | | | | | |
| | -13° -23° -13° -24° -14° -24° -13° -22° -15° -23° -14° -23° -12° -21° | | | | | | | | | |
| i) | What was the lowest temperature recorded in the week? A23° C B12° C C24° C D13° C | | | | | | | | | |
| ii) | The average maximum temperature for the week was -13.5° C. On which days was the maximum temperature greater than the average maximum temperature? | | | | | | | | | |
| iii) | What is the difference between the maximum and minimum temperature on Thursday? | | | | | | | | | |
| iv) | On which day of the week is the highest temperature recorded? | | | | | | | | | |
| Q14. | Competency Based Question (CBQ) | | | | | | | | | |
| | Score points | | | | | | | | | |
| | Archery 2 points 4 points | | | | | | | | | |
| | 6 points 8 points 10 points | | | | | | | | | |
| | In an Archery game, points are given according to the position of the arrow shot on the target board as shown in the above figure (2points, 4 points, 6 points, 8 points and 10 points in given order.) 10 points will be deducted if the arrow does not hit the target board. | | | | | | | | | |

| i) | Harnit tries 3 shots and gets the points in the given order: 4 points, 6 points and (-10) points. Find his total score. | | | | | | | |
|---------|---|------|------------------------------------|------|---|--|--|--|
| ii) | Vivek couldn't hit the board in 2 of his attempts and gets 8 points in the third attempt. Find Vivek's score. | | | | | | | |
| iii) | Rohan scores 8 points and 6 points during the first and second attempt respectively but couldn't hit the board in the third attempt. Find Rohan's score. | | | | | | | |
| iv) | Who among Harnit, Vivek and Rohan scored the maximum ? | | | | | | | |
| Q15. | Salim makes a profit of ₹1 by selling a story book and he incurs a loss of 50 paisa on selling an old stock notebook. a) In the month of June, he sells 45 storybooks and 10 notebooks. Find his total profit or loss in the month. b) In the next month he earns a profit of ₹70 by selling 75 storybooks. Find the number of notebooks he sold during this month. | | | | | | | |
| ANSWERS | | | | | | | | |
| Q1. | ₹1100 | Q2. | 6 jumps | Q3. | +4500; ₹3220 | | | |
| Q4. | 35min | Q5. | 18 marks | Q6. | 25°C | | | |
| Q7. | b) and d) | Q8. | -5°C | Q9. | a)24marks b)48 marks | | | |
| Q10. | i)35 ii)22 | Q11. | i)10 ii)5 iii)(-28) | Q12. | i)810 (Distributivity) ii)2600(Associativity) iii)5500 (Distributivity) | | | |
| Q13. | i)-24°C ii)Sunday, Monday, Wednesday, Saturday. iii)8 iv)Saturday | Q14. | i)0 ii)-12 iii)4 iv)Rohan | Q15. | i)₹40 profit ii)10 notebooks | | | |