



**RAMAGYA SCHOOL, NOIDA**  
**IMO OLYMPIAD WORKSHEET**  
**CLASS VII (2017-18)**

**(Value Based)**

1. An airline company makes a profit of Rs. 2244 on per ticket of business class while loses Rs.132 on every ticket of economy class. If the company sold 39406 tickets of economy class, how many tickets should it sell for business class to break even.  
a.2200      b.2318      c.2300      d.2218
2. While doing the science experiment in the physics lab, Pranav had to take 6 measurements of the temperature and write the average of those as an answer. If the measurements of the temperature is -2, -3, 2, 0, 1, -4, what is the final answer of his experiment ?  
a. 1      b. 2      c.3      d.4
3. An integer is divided by 8 giving a remainder of 4. The resulting quotient when divided by 5 gives a remainder of 3. The resulting quotient is then divided by 8 giving a quotient of 1 and a remainder of 6.What will the final remainder be if the order of the divisors is reversed?  
a. 9      b. 7      c. 6      d. 8
4. Sara is in the process of making ice cream. She has heated all the ingredients to 40 °C and put them in refrigerator to freeze. If the cooling rate is 9 °C per hour, the temperature in freezer after 12 hours will be °C.  
a. -128°C      b. -48°C      c. 128°C      d. 48°C

**(Concept Based)**

5. Subtract the sum of 86 and 3177 from -159  
a. -3104      b. -3322      c. 2104      d. 3020
6. The absolute value of  $|a - 4|$  if  $a$  is less than 4 is  
a.  $-(a - 4)$       b.  $a$       c. 4      d.  $a - 4$
7. Which number in the following pairs is larger:  
A) -10, 14 =      B) 7, 26 =      C) 26, 14 =      D) 3, 9 =
8. If  $a > b$ ,  $-a$  will be than  $-b$

a. >   b. <   c.=   d. none of these

9. Which of following is correct ?

a.  $800 + 94 = 840 + 9$    b.  $800 + 94 = 804 + 90$    c.  $800 + 94 = 80 + 94$    d.  $800 + 94 = 809 + 4$

10. What is 2 less than 16?

a.14   b.12   c.10   d. 9

11. Is the additive inverse of a negative number a positive.

a. T   b. F

**(Application)**

12. If 9 is added to thrice of a number gives 45, then the number is \_\_\_\_.

A. 12   B. 10   C. 11   D. 15

13. If  $\frac{2}{3}$  of a number is less than the original number by 20, then the number is \_\_\_\_.

A. 80   B. 55   C. 50   D. 60

14. How many integers are there between 0 and -6.

a. 4   b. 5   c. 6   d.3

15. An integer is divided by 8 giving a remainder of 4. The resulting quotient when divided by 5 gives a remainder of 3. The resulting quotient is then divided by 8 giving a quotient of 1 and a remainder of 6. What will the Final remainder be if the order of the divisors is reversed?

a. 9   b. 7   c. 6   d. 8

16. Add :  $1024+576+(-124)+(-376)$

a. 1000   b. 1100   c.1200   d. 1500

**(HOTS)**

17. 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.

a. 100   b.120   c. 150   d. 80

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

a. team A   b. team B   c. both teams   d. no teams

19. 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 ?

- a. 20
- b.26
- c.30
- d.5

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

- a. 36
- b.24
- c.20
- d.34

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

- a.20
- b. 0
- c. 30
- d.10