

Work Sheet – 03 (Higher Mathematics) for class – Ten (05.10.2020), Chapter - Six
Exercise - 6.2, Inequality

Creative Multiplication Choice Questions

Rafi has brought x pencils at Tk. 5 each and $(x + 4)$ pen at Tk. 12 each. His maximum total cost Tk. 133.

Answer to the questions No. (01 – 03) with the help of above information.

- What is the cost of total pencil?
 - Tk. $5x$
 - Tk. $12(x + 4)$
 - Tk. $(x - 5)$
 - Tk. $(x + 5)$
- Express the above information in form of inequality?
 - $5x + x + 4 \geq 133$
 - $5x + 12(x + 4) \leq 133$
 - $5x + 12x + 4 \leq 133$
 - $5x + 12(x + 4) = 133$
- What is the possible value of x ?
 - $x \geq 4$
 - $x \leq 4$
 - $x \geq 5$
 - $x \leq 5$

On the basis of following information answer to the questions No. (04 - 07):

The air distance of Jedda from Dhaka is 5000 km. The maximum speed of a jet-plane is 900 km/hour. But on way from Dhaka to Jedda, it faces air flowing at 100 km/hour in favor of its direction.

- What is the real speed of the jet-plane in km.?
 - 800
 - 900
 - 1000
 - 1100
- What is the distance in km the plane will cover at time t ?
 - $1000t$
 - $900t$
 - $800t$
 - 1000
- Which of the following will be an expression in inequality of the given word problem?
 - $1000t > 5000$
 - $1000t \geq 5000$

- $1000t < 5000$
 - $1000t \leq 5000$
- Which of the following is the solution of the inequality?
 - $1 > 5$
 - $t \geq 5$
 - $1 < 5$
 - $1 \leq 5$

A car runs x km in 5 hours and $(x + 100)$ in 4 hours. The average speed of the car does not exceed 100 km/hour. Then give the answer of question of no. (08 – 09) with the light of the stem.

- The mean velocity per hour is-
 - $\frac{x + 100}{9}$
 - $\frac{2x + 100}{9}$
 - $\frac{x - 100}{9}$
 - $\frac{100}{9}$
- Which is true?
 - $\frac{2x + 100}{9} \geq 100$
 - $\frac{x + 100}{9} \geq 100$
 - $\frac{2x - 100}{9} \leq 100$
 - $\frac{2x + 100}{9} \leq 100$

Creative Questions:

- David has bought x kg apples at the rate of Tk. 140 per kg. He has given a note of Tk. 1000 to the seller.
 - How much money will the seller return to David?
 - If the seller returns the remaining money with x number note of Tk.50 then express the problem in terms of an inequality and solve it.
 - Find the possible values of x and express it as a solution set.