

Academic Year: 2021-2022

Subject: Mathematics

Name: _____

Roll. No.: _____

Std.: X

Div.: _____

Topic: Linear Inequations

MCQ Max.

1. If $-x < -y$ then positive x, y carries the relationship

- a) $-x > -y$ b) $x > y$ c) $x < y$ d) none of these

2. If $a < b$ then $a + c$ _____ $b + c$

- a) $<$ b) $>$ c) \leq d) \geq

3. If $x > y$ then $\frac{1}{x}$ _____ $\frac{1}{y}$

- a) $<$ b) $>$ c) \leq d) \geq

4. If $3x + 4 < 16$ then _____.

- (a) $x < 4$ b) $x > 4$ c) $x \leq 4$ d) $x \geq 4$

5. If $4x - 2 < 2x + 10$

- (a) $x < 5$ b) $x > 6$ c) $x \leq 6$ d) none of these

6. $5x + 3 \leq 2x + 18$, find x where $x \in \mathbb{N}$.

- (a) $\{1, 2, 3, 4\}$ (b) $\{5, 4, 3, 2, 1\}$
(c) $\{1, 2, 3, 4, 5\}$ (d) option (b) & (c)

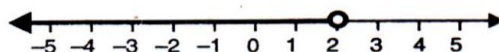
7. $2(x-1) \leq 9 - x$, as $x \in \mathbb{W}$ for the largest value of x is

- (a) $\{1, 2, 3\}$ (b) $\{3\}$
(c) $\{0, 1, 2, 3\}$ (d) none of these

8. As $x \in \mathbb{I}$, find $x : \frac{1}{2}(2x - 1) \leq 2x$

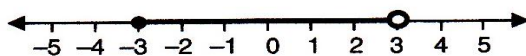
- (a) $\{0, 1, 2, 3, \dots\}$ (b) $\{-1, 0, 1, 2, 3, \dots\}$
(c) $\{1, 2, 3, \dots\}$ (d) option (a) & option (c) both

9. Solution set for give real line is ...



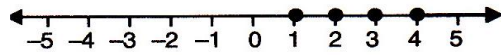
- (a) $x < 1$ b) $x > 2$ c) $x < 2, x \in \mathbb{I}$ d) $x < 2, x \in \mathbb{R}$

10. Find Solution set for the real number line



- (a) $\{x : -3 < x < 3, x \in \mathbb{R}\}$ (b) $\{x : -3 < x < 3, x \in \mathbb{N}\}$
(c) $\{x : -3 < x < 3, x \in \mathbb{I}\}$ (d) $\{x : -3 \leq x < 3, x \in \mathbb{R}\}$

11. Solution set for given number line if x is an integer.



- (a) $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ (b) $\{0, 1, 2, 3, 4\}$
 (c) $\{1, 2, 3, 4\}$ (d) $\{1, 2, 3, 4, 5\}$

12. If $5 < 2x - 1 < 11$ where $x \in R$, $x = ?$

- (a) $-1 < x < 5$ (b) $0 < x < 6$
 (c) $3 < x < 6$ (d) $2 < x < 6$

13. if $-1 < 3 + 4x < 23$; $x \in R$ then x lies between

- (a) $-1 < x < 4$ (b) $-1 < x < 5$
 (c) $1 > x > 4$ (d) none of these options

14. what is the value of x : If $\frac{x}{2} - 5 \leq \frac{x}{3} - 4$

- (a) $x < 6$ (b) $x > 6$ (c) $x \leq 6$ (d) $x = 6$

15. If $2y - 3 < y + 1 \leq 4y + 7$

- (a) $-2 < x < 4$ (b) $-2 < x < 5$
 (c) $-2 > x > 4$ (d) $-2 \leq y < 4$

16. If $8 + 3x \geq 28 - 2x$, $x = ?$

- a) $x > 4$ b) $x < 4$ c) $x \geq 4$ d) $x \leq 4$

2 Mark Questions

17. Solve for x :

$$-\frac{1}{3} \leq \frac{x}{2} - 1\frac{1}{3} \quad \text{and} \quad \frac{x}{2} - 1\frac{1}{3} < \frac{1}{6}$$

- (a) $2 \leq x < 5$ b) $2 \leq x < 3$]
 c) $-2 \leq x < 3$ d) $2 \leq x < 6$

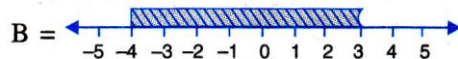
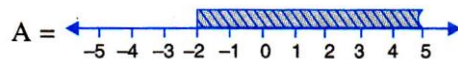
18. $P = \{x : -2 < x \leq 6, x \in R\}$ and $Q = \{x : 2 \leq x < 8, x \in R\}$, then $P \cap Q = ?$

- (a) $1 \leq x < 6$ b) $2 < x < 6$
 (c) $2 \leq x \leq 6$ d) $2 \leq x < 8$

19. If $2x - 5 \leq 5x + 4 \leq 19$ where $x \in I$, then $x = ?$

- (a) $-2 \leq x \leq 3$ (b) $-3 \leq x \leq 4$
 (c) $-3 \leq x \leq 3$ (d) $-2 \leq x \leq 3$

20. Find set A and set B where $x \in R$



- (a) $A = -4 \leq x < 3$, $B = -2 \leq x < 5$ (b) $B = -4 \leq x < 3$, $A = -2 \leq x < 5$
 (c) $A = -2 \leq x \leq 3$, $B = -2 \leq x \leq 3$ (d) $A = -2 \leq x < 3$, $B = -4 \leq x < 5$

1	B	2	A	3	A	4	A	5	D
6	D	7	B	8	A	9	D	10	D
11	C	12	C	13	B	14	C	15	D
16	C	17	B	18	C	19	C	20	B
21		22		23		24		25	