



STRAIGHT OBJECTIVE TYPE

This section contains multiple choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

1. Set of value of x for the inequation, $-15 < \frac{3(x-2)}{5} \leq 0$
(A) $-23 < X < 2$ (B) $-23 \leq X \leq 2$ (C) $-23 < X \leq 2$ (D) $-23 \leq X < 2$
2. Set of values of x for the inequation $-5 \leq \frac{2-3x}{4} \leq 9$
(A) $\frac{-34}{3} \leq x \leq \frac{22}{3}$ (B) $\frac{-34}{3} < x < \frac{22}{3}$ (C) $\frac{-34}{3} < x \leq \frac{22}{3}$ (D) $\frac{-34}{3} \leq x < \frac{22}{3}$
3. Set of values of x for the inequation $\frac{x-5}{x+2} < 0$
(A) $-2 \leq x \leq 5$ (B) $2 < x < 5$ (C) $-2 < x < 5$ (D) $x > 2$
- *4. Set of values of x for the inequation $\frac{4-3x}{5} < \frac{2x-5}{4}$
(A) $x > \frac{41}{22}$ (B) $x < \frac{41}{42}$ (C) $x \in \mathbb{R}$ (D) $x \geq \frac{41}{22}$
5. Set of values of x for the inequation $\frac{x+3}{x+5} > 5$
(A) $\frac{-11}{2} > x > 5$ (B) $x \in \mathbb{R}$ (C) $5 < x < \frac{-11}{2}$ (D) $\frac{-11}{2} < x < -5$
- *6. Set of values of x for the inequation $\frac{2x-3}{4} + 8 \geq 2 + \frac{4x}{3}$
(A) $x < 6.3$ (B) $x > 6.3$ (C) $x < 6$ (D) $x > 6$
7. Set of values of x for the system of inequation $4x + 3 \geq 2x + 17, 3x - 5 < -2$
(A) $x \in (-\infty, 0]$ (B) $x \in (0, \infty)$ (C) $x \in \mathbb{R}$ (D) $x \in \phi$
8. Set of values of x for the inequation $\frac{4+2x}{3} \geq \frac{x}{2} - 3$
(A) $x \leq -26$ (B) $x \in \mathbb{R}$ (C) $x \geq -26$ (D) $x \in \phi$
9. Set of values of x for the inequation $\frac{x}{4} < \frac{5x-2}{3} - \frac{7x-3}{5}$
(A) $x > 4$ (B) $x < 4$ (C) $-4 < x < 4$ (D) $x \in \mathbb{R}$
10. Set of values of x for the system of the inequation $\frac{4x}{3} - \frac{9}{4} < x + \frac{3}{4}, \frac{7x-1}{3} - \frac{7x+2}{6} > x$
(A) $4 < x < 9$ (B) $4 \leq x \leq 9$ (C) $x \geq 4$ (D) $x \leq 9$
11. Set of values of x for the system of the inequation $2(2x + 3) - 10 < 6(x - 2),$
 $\frac{2x-3}{4} + 6 \geq 2 + \frac{4x}{3}$

- (A) $x > \frac{-3}{2}$ (B) $x < \frac{-3}{2}$ (C) $x \in \mathbb{R}$ (D) $x \in \phi$

12. Set of values of x for the inequation $-3 \leq \frac{4-7x}{2} \leq 18$

- (A) $\frac{-32}{7} \geq x \geq \frac{10}{7}$ (B) $x < \frac{7}{9}$ (C) $\frac{-32}{7} \leq x \leq \frac{10}{7}$ (D) $x > \frac{7}{4}$

13. Set of values of x for the inequation $\frac{2}{x-3} < 0$ is

- (A) $x < 3$ (B) $x > 3$ (C) $x > 0$ (D) $x \in \phi$

14. $|x| > x$ if

- (A) $x > 0$ (B) $x < 0$ (C) all value of x (D) no value of x.

*15. Set of values of x which satisfies $\frac{(x^2-4)(x-2)}{(x-1)(x-6)} \geq 0$, is

- (A) $(-2, 1) \cup \{2\} \cup (6, \infty)$ (B) $[-2, 1) \cup \{2\} \cup (6, \infty)$
(C) $(-\infty, -2] \cup \{2\} \cup (6, \infty)$ (D) $[-2, 1) \cup (1, 6)$

MULTIPLE CORRECT TYPE

This section contains multiple correct answer(s) type questions. Each question has 4 choices (A), (B), (C) and (D), out of which ONE OR MORE is/are correct.

16. Which of the following is solution of the system of inequalities

$$x + 2 \leq 5, \quad 3x - 4 > -2 + x$$

- (A) $x = 1$ (B) $x = 2$ (C) $x = 3$ (D) $x = 5$

17. Which of the following is solution of the system of inequalities,

$$2(x+1) < x+5, \quad 3(x+2) > 2-x$$

- (A) 1 (B) 2 (C) 3 (D) 4

18. Which of the following is not the solution of the system of inequalities

$$\frac{x-2}{x+2} \geq 3, \quad 2x-7 \leq 5$$

- (A) +1 (B) 2 (C) -2 (D) -3

*19. What can be the possible value/values for x in the inequation $3-4x \leq 5$

- (A) $-\frac{1}{2}$ (B) $\frac{1}{2}$ (C) 0 (D) -1

20. Which of the following value/values satisfy the inequation

$$\frac{5x}{2} + \frac{3x}{4} \geq \frac{39}{4}$$

- (A) 3 (B) -3 (C) 5 (D) 0

ANSWERS

Straight Objective Type

1. (C)
2. (A)
3. (C)
4. (A)
5. (D)

6. (A)
7. (D)
8. (C)
9. (A)
10. (A)
11. (D)
12. (C)
13. (A)
14. (B)
15. (B)

MULTIPLE

16. (A, B, C)
17. (A, B)
18. (A, B)
19. (A, B, C)
20. (A, C)