EduSahara™ Assignment

Name : Solving Linear Inequations

Chapter : Linear Inequations

Grade : ICSE Grade VII

1. Solve the inequation $(8x-40)<0, x\in Z$

   (i) {4,3,2,1,0,...} (ii) {5,4,3,2,1,...} (iii) {6,7,8,9,10,...} (iv) {5,6,7,8,9,...}

2. Solve the inequation $(-5x-15)>0, x\in Z$

   (i) {-3,-2,-1,0,1,...} (ii) {-4,-5,-6,-7,-8,...} (iii) {-3,-4,-5,-6,-7,...} (iv) {-2,-1,0,1,2,...}

3. Solve the inequation $(x+8)\leq 0, x\in Z$

   (i) {-8,-7,-6,-5,-4,...} (ii) {-9,-10,-11,-12,-13,...} (iii) {-8,-9,-10,-11,-12,...} (iv) {-7,-6,-5,-4,-3,...}

4. Solve the inequation $(-2x+8)\geq 0, x\in Z$

   (i) {4,3,2,1,0,...} (ii) {3,2,1,0,-1,...} (iii) {5,6,7,8,9,...} (iv) {4,5,6,7,8,...}

5. Find the solution set for the given inequation
   $(4x+20)<0$, where the replacement set is {-3,-4,-5,-6,-7,-8,-9}

   (i) {-6,-7,-8,-9} (ii) {-4,-3,-2,-1,0} (iii) {-5,-6,-7,-8,-9} (iv) {-5,-4,-3,-2,-1} (v) {-6,-7,-8,-9,-10}

6. Find the solution set for the given inequation
   $(-5x-5)>0$, where the replacement set is {1,0,-1,-2,-3,-4,-5}

   (i) {-2,-3,-4,-5,-6} (ii) {-1,0,1,2,3} (iii) {-2,-3,-4,-5} (iv) {-1,-2,-3,-4,-5} (v) {0,1,2,3,4}

7. Find the solution set for the given inequation
   $(3x+27)\leq 0$, where the replacement set is {-6,-7,-8,-9,-10,-11,-12}

   (i) {-9,-10,-11,-12,-13} (ii) {-9,-8,-7,-6,-5} (iii) {-9,-10,-11,-12} (iv) {-10,-11,-12,-13,-14}

   (v) {-8,-7,-6,-5,-4}

8. Find the solution set for the given inequation
   $(8x-48)\geq 0$, where the replacement set is {3,4,5,6,7,8,9}

   (i) {6,7,8,9,10} (ii) {6,7,8,9} (iii) {5,4,3,2,1} (iv) {6,5,4,3,2} (v) {7,8,9,10,11}

9. The solution set of the inequality $(-x-1)<(x-8), x\in Z$ is

   (i) {0,1,2,3,4,...} (ii) {-3,-2,-1,0,1,...} (iii) {4,5,6,7,8,...} (iv) {3,2,1,0,-1,...}

10. The solution set of the inequality $(-9x-7)>(x-8), x\in Z$ is

    (i) {1,2,3,4,5,...} (ii) {0,-1,-2,-3,-4,...} (iii) {5,4,3,2,1,...} (iv) {-4,-5,-6,-7,-8,...}

11. The solution set of the inequality $(6x-9)\leq(-x-4), x\in Z$ is

    (i) {-1,-2,-3,-4,-5,...} (ii) {1,2,3,4,5,...} (iii) {0,-1,-2,-3,-4,...}

12. The solution set of the inequality $(-9x)\geq(6x+8), x\in Z$ is

    (i) {-4,-5,-6,-7,-8,...} (ii) {-1,-2,-3,-4,-5,...} (iii) {-2,-3,-4,-5,-6,...} (iv) {0,1,2,3,4,...}

13. The solution set of the inequality $(6x-7)<3, x\in Z$ is

(i) {0,-1,-2,-3,-4,...} (ii) {-1,-2,-3,-4,-5,...} (iii) {2,3,4,5,6,...} (iv) {1,0,-1,-2,-3,...}

14. The solution set of the inequality $(4x+8)>(-9), x\in Z$ is

(i) {2,1,0,-1,-2,...} (ii) {-4,-3,-2,-1,0,...} (iii) {1,0,-1,-2,-3,...} (iv) {-5,-6,-7,-8,-9,...}

15. The solution set of the inequality $(-x-5)\leq(-5), x\in Z$ is

(i) {0,1,2,3,4,...} (ii) {2,3,4,5,6,...} (iii) {-1,-2,-3,-4,-5,...} (iv) {0,-1,-2,-3,-4,...}

16. The solution set of the inequality $(4x+3)\geq(-4), x\in Z$ is

(i) {1,2,3,4,5,...} (ii) {-2,-3,-4,-5,-6,...} (iii) {-1,0,1,2,3,...}

17. The simplified form of the inequality $(-4x+3)<0, x\in Z$ is

(i) $x<1, x\in Z$ (ii) $x\leq\frac{1}{2}, x\in Z$ (iii) $x>\frac{3}{4}, x\in Z$ (iv) $x>1, x\in Z$ (v) $x\geq\frac{1}{2}, x\in Z$

18. The simplified form of the inequality $(-3x-8)>(-8), x\in Z$ is

(i) $x\geq(-\frac{1}{3}), x\in Z$ (ii) $x\leq(-\frac{1}{3}), x\in Z$ (iii) $x>\frac{1}{3}, x\in Z$ (iv) $x<0, x\in Z$ (v) $x<\frac{1}{3}, x\in Z$

19. The simplified form of the inequality $(-8x+9)\leq(-3), x\in Z$ is

(i) $x>\frac{13}{8}, x\in Z$ (ii) $x\geq\frac{3}{2}, x\in Z$ (iii) $x<\frac{13}{8}, x\in Z$ (iv) $x\geq\frac{11}{8}, x\in Z$ (v) $x\leq\frac{11}{8}, x\in Z$

20. The simplified form of the inequality $(-4x-6)\geq(-1), x\in Z$ is

(i) $x<(-1), x\in Z$ (ii) $x\leq(-\frac{5}{4}), x\in Z$ (iii) $x\leq(-\frac{3}{2}), x\in Z$ (iv) $x>(-1), x\in Z$ (v) $x\geq(-\frac{3}{2}), x\in Z$

21. The simplified form of the inequality $(-9x+4)<(3x-2), x\in Z$ is

(i) $x<\frac{7}{12}, x\in Z$ (ii) $x>\frac{7}{12}, x\in Z$ (iii) $x>\frac{1}{2}, x\in Z$ (iv) $x\geq\frac{5}{12}, x\in Z$ (v) $x\leq\frac{5}{12}, x\in Z$

22. The simplified form of the inequality $(5x+1)>(4x-1), x\in Z$ is

(i) $x<(-3), x\in Z$ (ii) $x>(-3), x\in Z$ (iii) $x\leq(-1), x\in Z$ (iv) $x\geq(-1), x\in Z$ (v) $x>(-2), x\in Z$

23. The simplified form of the inequality $(-9x-9)\leq(-6x-3), x\in Z$ is

(i) $x>(-\frac{5}{3}), x\in Z$ (ii) $x\geq(-\frac{7}{3}), x\in Z$ (iii) $x\leq(-\frac{7}{3}), x\in Z$ (iv) $x<(-\frac{5}{3}), x\in Z$ (v) $x\geq(-2), x\in Z$

24. The simplified form of the inequality $(8x+9)\geq(3x+4), x\in Z$ is

(i) $x\leq(-\frac{4}{5}), x\in Z$ (ii) $x>(-\frac{6}{5}), x\in Z$ (iii) $x\geq(-1), x\in Z$ (iv) $x\geq(-\frac{4}{5}), x\in Z$ (v) $x<(-\frac{6}{5}), x\in Z$

25. Find the solution set of $10<(5x+1)<25, x\in Z$

(i) {3,4,5} (ii) {0,1,2} (iii) {4,5,6} (iv) {2,3,4} (v) {1,2,3}

26. Find the solution set of $4 > (-5x+7) > (-11), x \in Z$

(i) {3,4,5} (ii) {2,3,4} (iii) {-1,0,1} (iv) {1,2,3} (v) {0,1,2}

27. Find the solution set of $(-16) \leq (-7x+5) \leq 11, x \in Z$

(i) {5,4,3,2} (ii) {1,0,-1,-2} (iii) {3,2,1,0} (iv) {4,3,2,1} (v) {2,1,0,-1}

28. Find the solution set of $(-14) \geq (-8x-7) \geq (-26), x \in Z$

(i) {2,3} (ii) {-1,0} (iii) {3,4} (iv) {0,1} (v) {1,2}

29. Find the solution set of $(-11) < (-5x-2) \leq 14, x \in Z$

(i) {0,-1,-2,-3,-4} (ii) {3,2,1,0,-1} (iii) {-1,-2,-3,-4,-5} (iv) {2,1,0,-1,-2} (v) {1,0,-1,-2,-3}

30. Find the solution set of $4 > (5x+8) \geq (-21), x \in Z$

(i) {-1,-2,-3,-4,-5} (ii) {-3,-4,-5,-6,-7} (iii) {1,0,-1,-2,-3} (iv) {-2,-3,-4,-5,-6} (v) {0,-1,-2,-3,-4}

31. Find the solution set of $4 \leq (-x-7) < 15, x \in Z$

(i) {-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20} (ii) {-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22}

(iii) {-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19} (iv) {-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23}

(v) {-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21}

32. Find the solution set of $4 \geq (-x+9) > (-5), x \in Z$

(i) {6,7,8,9,10,11,12,13,14} (ii) {7,8,9,10,11,12,13,14,15} (iii) {3,4,5,6,7,8,9,10,11}

(iv) {4,5,6,7,8,9,10,11,12} (v) {5,6,7,8,9,10,11,12,13}

Assignment Key

1) (i)	2) (ii)	3) (iii)	4) (i)	5) (i)	6) (iii)
7) (iii)	8) (ii)	9) (iii)	10) (ii)	11) (iii)	12) (ii)
13) (iv)	14) (ii)	15) (i)	16) (iii)	17) (iii)	18) (iv)
19) (ii)	20) (ii)	21) (iii)	22) (v)	23) (v)	24) (iii)
25) (iv)	26) (iv)	27) (iii)	28) (v)	29) (v)	30) (i)
31) (v)	32) (v)				