

EduSahara™ Learning Center Assignment**Grade : Class X, ICSE****Chapter : Linear Inequations****Name : Linear Inequations**

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

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

2. Solve the inequation $(9x + 72) > 0, x \in \mathbb{Z}$

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

3. Solve the inequation $(-3x + 9) \leq 0, x \in \mathbb{Z}$

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

4. Solve the inequation $(-3x - 24) \geq 0, x \in \mathbb{Z}$

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

Find the solution set for the given inequation

5. $(4x - 20) < 0$, where the replacement set is $\{7, 6, 5, 4, 3, 2, 1\}$

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

6. Find the solution set for the given inequation

$(3x - 6) > 0$, where the replacement set is $\{0,1,2,3,4,5,6\}$

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

Find the solution set for the given inequation

7. $(3x + 3) \leq 0$, where the replacement set is $\{2,1,0,-1,-2,-3,-4\}$

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

Find the solution set for the given inequation

8. $(x + 8) \geq 0$, where the replacement set is $\{-11,-10,-9,-8,-7,-6,-5\}$

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

9. Which of the following is an inequation?

- (i) $(7x + 5) \geq 0, x \in \mathbb{Z}$ (ii) $(4x + 6)$ (iii) 5 (iv) $(2x + 9) = 0$
-

10. Which of the following is not an inequation?

- (i) $(x - 8) < 9, x \in \mathbb{Z}$
 - (ii) $(-5x - 8) = 8$
 - (iii) $(-x - 7) \leq 6, x \in \mathbb{Z}$
 - (iv) $(6x + 7) \geq (-9), x \in \mathbb{Z}$
 - (v) $(-6x + 3) > (-7), x \in \mathbb{Z}$
-

11. Which of the following is not an inequation?

- (i) $(7x + 4) \leq (4x + 3), x \in \mathbb{Z}$
- (ii) $(8x + 5) < (-5x - 9), x \in \mathbb{Z}$
- (iii) $(7x + 1) = (-2x)$

$$(iv) \quad (-8x + 1) > (3x - 4), x \in \mathbb{Z}$$

$$(v) \quad (2x + 1) \geq 3x, x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$12. \quad (-3x - 8) < (-7x - 5), x \in \mathbb{Z}$$

$$(i) \quad (6x - 12) < (2x - 9), x \in \mathbb{Z}$$

$$(ii) \quad (-3x - 8) > (2x - 9), x \in \mathbb{Z}$$

$$(iii) \quad (-3x - 8) < (2x - 9), x \in \mathbb{Z}$$

$$(iv) \quad (6x - 12) > (-7x - 5), x \in \mathbb{Z}$$

$$(v) \quad (6x - 12) < (-7x - 5), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$13. \quad (x + 5) < (9x + 2), x \in \mathbb{Z}$$

$$(i) \quad (-2x + 8) < (6x + 5), x \in \mathbb{Z}$$

$$(ii) \quad (-2x + 8) < (9x + 2), x \in \mathbb{Z}$$

$$(iii) \quad (x + 5) < (6x + 5), x \in \mathbb{Z}$$

$$(iv) \quad (x + 5) > (6x + 5), x \in \mathbb{Z}$$

$$(v) \quad (-2x + 8) > (9x + 2), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$14. \quad (9x + 9) \leq (-5x + 5), x \in \mathbb{Z}$$

$$(i) \quad (4x + 5) > (-5x + 5), x \in \mathbb{Z}$$

$$(ii) \quad (4x + 5) \leq (-10x + 1), x \in \mathbb{Z}$$

$$(iii) \quad (9x + 9) > (-10x + 1), x \in \mathbb{Z}$$

$$(iv) \quad (4x + 5) < (-5x + 5), x \in \mathbb{Z}$$

$$(v) \quad (9x + 9) < (-10x + 1), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$15. \quad (-x + 8) \leq (9x + 8), x \in \mathbb{Z}$$

$$(i) \quad (-7x + 11) < (9x + 8), x \in \mathbb{Z}$$

$$(ii)$$

$$(-7x + 11) > (9x + 8), x \in \mathbb{Z}$$

$$(iii) (-x + 8) < (3x + 11), x \in \mathbb{Z}$$

$$(iv) (-x + 8) > (3x + 11), x \in \mathbb{Z}$$

$$(v) (-7x + 11) \leq (3x + 11), x \in \mathbb{Z}$$

Which of the following inequations is the same as

16. $(-2x + 8) > (9x + 8), x \in \mathbb{Z}$

$$(i) (-2x + 8) > (11x + 4), x \in \mathbb{Z}$$

$$(ii) 4 > (9x + 8), x \in \mathbb{Z}$$

$$(iii) 4 < (9x + 8), x \in \mathbb{Z}$$

$$(iv) 4 > (11x + 4), x \in \mathbb{Z}$$

$$(v) (-2x + 8) < (11x + 4), x \in \mathbb{Z}$$

Which of the following inequations is the same as

17. $(-7x) > (5x - 5), x \in \mathbb{Z}$

$$(i) (-9x - 4) < (5x - 5), x \in \mathbb{Z}$$

$$(ii) (-7x) < (3x - 9), x \in \mathbb{Z}$$

$$(iii) (-7x) > (3x - 9), x \in \mathbb{Z}$$

$$(iv) (-9x - 4) > (5x - 5), x \in \mathbb{Z}$$

$$(v) (-9x - 4) > (3x - 9), x \in \mathbb{Z}$$

Which of the following inequations is the same as

18. $(4x + 6) \geq (3x + 1), x \in \mathbb{Z}$

$$(i) (4x + 6) < (5x + 6), x \in \mathbb{Z}$$

$$(ii) (6x + 11) \geq (5x + 6), x \in \mathbb{Z}$$

$$(iii) (4x + 6) > (5x + 6), x \in \mathbb{Z}$$

$$(iv) (6x + 11) < (3x + 1), x \in \mathbb{Z}$$

$$(v) (6x + 11) > (3x + 1), x \in \mathbb{Z}$$

Which of the following inequations is the same as

19. $(-7x + 3) \geq (-9x + 1), x \in \mathbb{Z}$

(i) $(-8x - 3) \geq (-10x - 5), x \in \mathbb{Z}$

(ii) $(-7x + 3) < (-10x - 5), x \in \mathbb{Z}$

(iii) $(-8x - 3) < (-9x + 1), x \in \mathbb{Z}$

(iv) $(-7x + 3) > (-10x - 5), x \in \mathbb{Z}$

(v) $(-8x - 3) > (-9x + 1), x \in \mathbb{Z}$

Which of the following inequations is the same as

20. $(-6x - 6) < (4x + 9), x \in \mathbb{Z}$

(i) $(18x + 18) > (4x + 9), x \in \mathbb{Z}$

(ii) $(-6x - 6) < (-12x - 27), x \in \mathbb{Z}$

(iii) $(-6x - 6) > (-12x - 27), x \in \mathbb{Z}$

(iv) $(18x + 18) > (-12x - 27), x \in \mathbb{Z}$

(v) $(18x + 18) < (4x + 9), x \in \mathbb{Z}$

Which of the following inequations is the same as

21. $(-2x - 5) \leq (2x + 7), x \in \mathbb{Z}$

(i) $(-2x - 5) > (18x + 63), x \in \mathbb{Z}$

(ii) $(-2x - 5) < (18x + 63), x \in \mathbb{Z}$

(iii) $(-18x - 45) \leq (18x + 63), x \in \mathbb{Z}$

(iv) $(-18x - 45) < (2x + 7), x \in \mathbb{Z}$

(v) $(-18x - 45) > (2x + 7), x \in \mathbb{Z}$

Which of the following inequations is the same as

22. $(6x - 4) > (-2x - 6), x \in \mathbb{Z}$

(i) $(42x - 28) > (-2x - 6), x \in \mathbb{Z}$

(ii) $(42x - 28) > (-14x - 42), x \in \mathbb{Z}$

(iii) $(6x - 4) < (-14x - 42), x \in \mathbb{Z}$

(iv) $(6x - 4) > (-14x - 42), x \in \mathbb{Z}$

(v) $(42x - 28) < (-2x - 6), x \in \mathbb{Z}$

23.

Which of the following inequations is the same as

$$(4x - 3) \geq (6x - 3), x \in \mathbb{Z}$$

(i) $(-16x + 12) < (6x - 3), x \in \mathbb{Z}$

(ii) $(4x - 3) > (-24x + 12), x \in \mathbb{Z}$

(iii) $(4x - 3) < (-24x + 12), x \in \mathbb{Z}$

(iv) $(-16x + 12) \leq (-24x + 12), x \in \mathbb{Z}$

(v) $(-16x + 12) > (6x - 3), x \in \mathbb{Z}$

Which of the following inequations is not the same as

24. $(-9x - 5) < (-6x - 9), x \in \mathbb{Z}$

(i) $(-8) < (-7x - 7), x \in \mathbb{Z}$

(ii) $(-10x - 3) < (-7x - 7), x \in \mathbb{Z}$

(iii) $(-8x + 2) < (-5x - 2), x \in \mathbb{Z}$

(iv) $(-1) < (3x - 5), x \in \mathbb{Z}$

(v) $(-8) < (3x - 12), x \in \mathbb{Z}$

Which of the following inequations is not the same as

25. $(-8x - 5) < (2x - 3), x \in \mathbb{Z}$

(i) $(-6x - 10) < (4x - 8), x \in \mathbb{Z}$

(ii) $(-17x + 1) < (4x - 8), x \in \mathbb{Z}$

(iii) $(-5x - 2) < 5x, x \in \mathbb{Z}$

(iv) $(-6x - 12) < (4x - 10), x \in \mathbb{Z}$

(v) $(-17x + 1) < (-7x + 3), x \in \mathbb{Z}$

Which of the following inequations is not the same as

26. $(-3x - 4) \leq (8x + 5), x \in \mathbb{Z}$

(i) $(x - 2) \leq (12x + 7), x \in \mathbb{Z}$

(ii) $(-x - 2) \leq (7x + 3), x \in \mathbb{Z}$

(iii) $(-9x + 1) \leq (2x + 10), x \in \mathbb{Z}$

(iv) $(-4x - 6) \leq (7x + 3), x \in \mathbb{Z}$

(v) $(-x - 2) \leq (10x + 7), x \in \mathbb{Z}$

Which of the following inequations is not the same as

27. $(-x - 5) \leq (3x + 6), x \in \mathbb{Z}$

(i) $(-4x - 10) \leq 1, x \in \mathbb{Z}$

(ii) $(-6x - 8) \leq (-2x + 3), x \in \mathbb{Z}$

(iii) $(-3x - 12) \leq (x - 1), x \in \mathbb{Z}$

(iv) $(7x - 4) \leq (11x + 7), x \in \mathbb{Z}$

(v) $(-3x - 12) \leq (11x + 7), x \in \mathbb{Z}$

Which of the following inequations is not the same as

28. $(3x - 5) > (-7x + 8), x \in \mathbb{Z}$

(i) $(6x - 7) > (-4x + 6), x \in \mathbb{Z}$

(ii) $(6x - 7) > (-x - 1), x \in \mathbb{Z}$

(iii) $(10x - 1) > 12, x \in \mathbb{Z}$

(iv) $(9x - 14) > (-x - 1), x \in \mathbb{Z}$

(v) $(-3x - 7) > (-13x + 6), x \in \mathbb{Z}$

Which of the following inequations is not the same as

29. $(9x - 3) > (x + 2), x \in \mathbb{Z}$

(i) $(4x - 9) > (-4x - 4), x \in \mathbb{Z}$

(ii) $(7x - 7) > (-x - 2), x \in \mathbb{Z}$

(iii) $(4x - 9) > (2x - 7), x \in \mathbb{Z}$

(iv) $(14x - 3) > (6x + 2), x \in \mathbb{Z}$

(v) $(10x - 12) > (2x - 7), x \in \mathbb{Z}$

Which of the following inequations is not the same as

30. $(3x + 7) \geq (x + 4), x \in \mathbb{Z}$

(i) $(-6x + 10) \geq (-8x + 7), x \in \mathbb{Z}$

(ii) $(x - 2) \geq (-x - 5), x \in \mathbb{Z}$

(iii) $(6x + 10) \geq (4x + 7), x \in \mathbb{Z}$

$$(iv) (-4x - 2) \geq (-6x - 5), x \in \mathbb{Z}$$

$$(v) (x - 2) \geq (4x + 7), x \in \mathbb{Z}$$

Which of the following inequations is not the same as

31. $(-8x - 2) \geq (-3x - 2), x \in \mathbb{Z}$

(i) $(-10x + 6) \geq (-5x + 6), x \in \mathbb{Z}$

(ii) $7 \geq (5x + 7), x \in \mathbb{Z}$

(iii) $(-13x + 1) \geq (-8x + 1), x \in \mathbb{Z}$

(iv) $(-16x + 6) \geq (-11x + 6), x \in \mathbb{Z}$

(v) $(-16x + 6) \geq (-5x + 6), x \in \mathbb{Z}$

32. The solution set of the inequality $(6x - 7) < (-3x + 9), x \in \mathbb{Z}$ is

(i) $\{-2, -3, -4, -5, -6, \dots\}$

(ii) $\{1, 0, -1, -2, -3, \dots\}$

(iii) $\{2, 3, 4, 5, 6, \dots\}$

(iv) $\{-1, -2, -3, -4, -5, \dots\}$

33. The solution set of the inequality $(6x - 9) > (3x - 1), x \in \mathbb{Z}$ is

(i) $\{3, 4, 5, 6, 7, \dots\}$

(ii) $\{2, 3, 4, 5, 6, \dots\}$

(iii) $\{2, 1, 0, -1, -2, \dots\}$

(iv) $\{-1, 0, 1, 2, 3, \dots\}$

34. The solution set of the inequality $(-9x - 7) \leq (3x - 8), x \in \mathbb{Z}$ is

(i) $\{-1, -2, -3, -4, -5, \dots\}$

(ii) $\{1, 2, 3, 4, 5, \dots\}$

(iii) $\{0, -1, -2, -3, -4, \dots\}$

(iv) $\{2, 3, 4, 5, 6, \dots\}$

35. The solution set of the inequality $(-3x + 8) \geq (-6x - 3), x \in \mathbb{Z}$ is

(i) $\{1, 0, -1, -2, -3, \dots\}$

(ii) $\{-4, -5, -6, -7, -8, \dots\}$

(iii) $\{-3, -2, -1, 0, 1, \dots\}$

(iv) $\{4, 5, 6, 7, 8, \dots\}$

36.

The solution set of the inequality $(-7x - 6) < 2, x \in \mathbb{Z}$ is

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

37. The solution set of the inequality $(-7x + 6) > (-9), x \in \mathbb{Z}$ is

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

38. The solution set of the inequality $(-8x + 1) \leq 1, x \in \mathbb{Z}$ is

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

39. The solution set of the inequality $(-5x - 6) \geq (-4), x \in \mathbb{Z}$ is

- (i) $\{-4, -5, -6, -7, -8, \dots\}$
 - (ii) $\{-1, -2, -3, -4, -5, \dots\}$
 - (iii) $\{0, 1, 2, 3, 4, \dots\}$
-

40. The simplified form of the inequality $(-x - 8) < (-9), x \in \mathbb{Z}$ is

- (i) $x > 1, x \in \mathbb{Z}$
 - (ii) $x < 2, x \in \mathbb{Z}$
 - (iii) $x \geq 0, x \in \mathbb{Z}$
 - (iv) $x > 2, x \in \mathbb{Z}$
 - (v) $x \leq 0, x \in \mathbb{Z}$
-

41. The simplified form of the inequality $(-3x + 1) > (-1), x \in \mathbb{Z}$ is

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

(v) $x \leq \frac{1}{3}, x \in \mathbb{Z}$

42. The simplified form of the inequality $(-7x - 6) \leq (-3), x \in \mathbb{Z}$ is

(i) $x \leq (-\frac{4}{7}), x \in \mathbb{Z}$

(ii) $x \geq (-\frac{3}{7}), x \in \mathbb{Z}$

(iii) $x > (-\frac{2}{7}), x \in \mathbb{Z}$

(iv) $x < (-\frac{2}{7}), x \in \mathbb{Z}$

(v) $x \geq (-\frac{4}{7}), x \in \mathbb{Z}$

43. The simplified form of the inequality $(-6x + 1) \geq 4, x \in \mathbb{Z}$ is

(i) $x \leq (-\frac{2}{3}), x \in \mathbb{Z}$

(ii) $x \geq (-\frac{2}{3}), x \in \mathbb{Z}$

(iii) $x < (-\frac{1}{3}), x \in \mathbb{Z}$

(iv) $x \leq (-\frac{1}{2}), x \in \mathbb{Z}$

(v) $x > (-\frac{1}{3}), x \in \mathbb{Z}$

44. The simplified form of the inequality $(-x - 1) < (2x + 3), x \in \mathbb{Z}$ is

(i) $x \geq (-\frac{5}{3}), x \in \mathbb{Z}$

(ii) $x > (-\frac{4}{3}), x \in \mathbb{Z}$

(iii) $x < (-1), x \in \mathbb{Z}$

(iv) $x \leq (-\frac{5}{3}), x \in \mathbb{Z}$

(v) $x > (-1), x \in \mathbb{Z}$

45. The simplified form of the inequality $(-5x - 4) > (5x - 9), x \in \mathbb{Z}$ is

(i) $x \geq \frac{2}{5}, x \in \mathbb{Z}$

(ii) $x \leq \frac{2}{5}, x \in \mathbb{Z}$

(iii) $x < \frac{1}{2}, x \in \mathbb{Z}$

(iv) $x > \frac{3}{5}, x \in \mathbb{Z}$

$$(v) \quad x < \frac{3}{5}, x \in \mathbb{Z}$$

46. The simplified form of the inequality $(-3x + 5) \leq (-4x + 6), x \in \mathbb{Z}$ is

(i) $x \leq 1, x \in \mathbb{Z}$

(ii) $x \leq 2, x \in \mathbb{Z}$

(iii) $x > 0, x \in \mathbb{Z}$

(iv) $x \geq 2, x \in \mathbb{Z}$

(v) $x < 0, x \in \mathbb{Z}$

47. The simplified form of the inequality $(9x - 7) \geq (3x + 3), x \in \mathbb{Z}$ is

(i) $x > \frac{3}{2}, x \in \mathbb{Z}$

(ii) $x \leq \frac{11}{6}, x \in \mathbb{Z}$

(iii) $x \geq \frac{5}{3}, x \in \mathbb{Z}$

(iv) $x \geq \frac{11}{6}, x \in \mathbb{Z}$

(v) $x < \frac{3}{2}, x \in \mathbb{Z}$

48. Which of the following statements are true?

- a) Multiplying same negative number on both sides does not change the inequality
- b) Adding same number on both sides does not change the inequality
- c) Dividing same positive number on both sides does not change the inequality
- d) Dividing same negative number on both sides does not change the inequality
- e) Subtracting same number on both sides does not change the inequality
- f) Multiplying same positive number on both sides does not change the inequality

(i) {b,c,e,f} (ii) {d,c} (iii) {a,b} (iv) {a,d,e} (v) {a,f,b}

Which of the following inequations is not the same as

49. $(-7x - 9) < (2x - 3), x \in \mathbb{Z}$

(i) $(14x + 18) > (-4x + 6), x \in \mathbb{Z}$

(ii) $(-42x - 54) < (12x - 18), x \in \mathbb{Z}$

(iii) $(63x + 81) > (-18x + 27), x \in \mathbb{Z}$

(iv) $(14x + 18) < (12x - 18), x \in \mathbb{Z}$

(v) $(28x + 36) > (-8x + 12), x \in \mathbb{Z}$

Which of the following inequations is not the same as

50. $(5x - 5) \leq (7x + 7), x \in \mathbb{Z}$

(i) $(5x - 5) \leq (-28x - 28), x \in \mathbb{Z}$

(ii) $(5x - 5) \leq (7x + 7), x \in \mathbb{Z}$

(iii) $(-40x + 40) \geq (-56x - 56), x \in \mathbb{Z}$

(iv) $(-45x + 45) \geq (-63x - 63), x \in \mathbb{Z}$

(v) $(-20x + 20) \geq (-28x - 28), x \in \mathbb{Z}$

Which of the following inequations is not the same as

51. $(-7x + 7) > (4x - 7), x \in \mathbb{Z}$

(i) $(-63x + 63) > (36x - 63), x \in \mathbb{Z}$

(ii) $(63x - 63) > (36x - 63), x \in \mathbb{Z}$

(iii) $(42x - 42) < (-24x + 42), x \in \mathbb{Z}$

(iv) $(63x - 63) < (-36x + 63), x \in \mathbb{Z}$

(v) $(-42x + 42) > (24x - 42), x \in \mathbb{Z}$

Which of the following inequations is not the same as

52. $(-6x - 1) \geq (-5x - 9), x \in \mathbb{Z}$

(i) $(24x + 4) \leq (20x + 36), x \in \mathbb{Z}$

(ii) $(-6x - 1) \geq (-5x - 9), x \in \mathbb{Z}$

(iii) $(-12x - 2) \geq (-10x - 18), x \in \mathbb{Z}$

(iv) $(-18x - 3) \geq (-15x - 27), x \in \mathbb{Z}$

(v) $(-6x - 1) \geq (-10x - 18), x \in \mathbb{Z}$

Find the solution set of given inequality

53. $(-4x - 4) < 0, x \in \mathbb{Z}$

(i) $\{0, 1, 2, 3, \dots\}$

(ii) $\{-1, -2, -3, -4, \dots\}$

(iii) $\{-2, -3, -4, -5, \dots\}$

(iv) $\{-1, 0, 1, 2, \dots\}$

54. Find the solution set of given inequality

$$(-6x + 18) > 0, x \in \mathbb{Z}$$

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

Find the solution set of given inequality

55. $(-7x + 21) \leq 0, x \in \mathbb{Z}$

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

Find the solution set of given inequality

56. $(4x - 16) \geq 0, x \in \mathbb{Z}$

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

57. Find the solution set of $16 < (8x - 2) < 28, x \in \mathbb{Z}$

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

58. Find the solution set of $(-1) > (-6x - 5) > (-15), x \in \mathbb{Z}$

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

59. Find the solution set of $0 \leq (-6x - 7) \leq 26, x \in \mathbb{Z}$

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

(iv) $\{-3,-4,-5,-6\}$

(v) $\{-1,-2,-3,-4\}$

60. Find the solution set of $6 \geq (5x - 8) \geq (-19), x \in \mathbb{Z}$

(i) $\{4,3,2,1,0\}$

(ii) $\{3,2,1,0,-1\}$

(iii) $\{1,0,-1,-2,-3\}$

(iv) $\{0,-1,-2,-3,-4\}$

(v) $\{2,1,0,-1,-2\}$

61. Find the solution set of $(-12) < (-3x - 9) \leq 11, x \in \mathbb{Z}$

(i) $\{1,0,-1,-2,-3,-4,-5\}$

(ii) $\{-2,-3,-4,-5,-6,-7,-8\}$

(iii) $\{-1,-2,-3,-4,-5,-6,-7\}$

(iv) $\{2,1,0,-1,-2,-3,-4\}$

(v) $\{0,-1,-2,-3,-4,-5,-6\}$

62. Find the solution set of $7 > (x - 2) \geq (-4), x \in \mathbb{Z}$

(i) $\{10,9,8,7,6,5,4,3,2,1,0\}$

(ii) $\{7,6,5,4,3,2,1,0,-1,-2,-3\}$

(iii) $\{6,5,4,3,2,1,0,-1,-2,-3,-4\}$

(iv) $\{9,8,7,6,5,4,3,2,1,0,-1\}$

(v) $\{8,7,6,5,4,3,2,1,0,-1,-2\}$

63. Find the solution set of $3 \leq (8x - 2) < 15, x \in \mathbb{Z}$

(i) $\{1,2\}$

(ii) $\{-1,0\}$

(iii) $\{3,4\}$

(iv) $\{0,1\}$

(v) $\{2,3\}$

64. Find the solution set of $(-7) \geq (-7x - 1) > (-20), x \in \mathbb{Z}$

(i) $\{2,3\}$

(ii) $\{-1,0\}$

(iii) $\{0,1\}$

(iv) $\{1,2\}$

(v) $\{3,4\}$

Assignment Key

- 1) (ii)
- 2) (ii)
- 3) (ii)
- 4) (iii)
- 5) (v)
- 6) (iv)
- 7) (iv)
- 8) (v)
- 9) (i)
- 10) (ii)
- 11) (iii)
- 12) (i)
- 13) (i)
- 14) (ii)
- 15) (v)
- 16) (iv)
- 17) (v)
- 18) (ii)
- 19) (i)
- 20) (iv)
- 21) (iii)
- 22) (ii)
- 23) (iv)
- 24) (i)
- 25) (ii)
- 26) (ii)
- 27) (v)
- 28) (ii)
- 29) (iii)
- 30) (v)
- 31) (v)
- 32) (ii)
- 33) (i)
- 34) (ii)
- 35) (iii)
- 36) (iii)
- 37) (iv)
- 38) (i)
- 39) (ii)
- 40) (i)
- 41) (iv)
- 42) (ii)
- 43) (iv)
- 44) (ii)
- 45) (iii)
- 46) (i)
- 47) (iii)
- 48) (i)
- 49) (iv)
- 50) (i)
- 51) (ii)
- 52) (v)
- 53) (i)
- 54) (i)
- 55) (i)

- 56) (iv)
- 57) (ii)
- 58) (iv)
- 59) (iii)
- 60) (v)
- 61) (v)
- 62) (v)
- 63) (i)
- 64) (iv)