



1. Solve the inequation $(4x+4) < 0, x \in \mathbb{Z}$

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

2. Solve the inequation $(-8x+72) > 0, x \in \mathbb{Z}$

- (i) $\{10, 11, 12, 13, 14, \dots\}$ (ii) $\{8, 7, 6, 5, 4, \dots\}$ (iii) $\{9, 10, 11, 12, 13, \dots\}$ (iv) $\{9, 8, 7, 6, 5, \dots\}$

3. Solve the inequation $(-9x-45) \leq 0, x \in \mathbb{Z}$

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

4. Solve the inequation $(2x+16) \geq 0, x \in \mathbb{Z}$

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

5. Find the solution set for the given inequation

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

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

6. Find the solution set for the given inequation

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

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

7. Find the solution set for the given inequation

$(-5x-45) \leq 0$, where the replacement set is $\{-12, -11, -10, -9, -8, -7, -6\}$

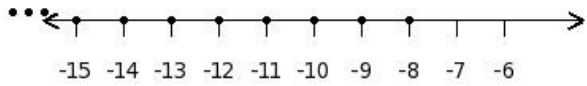
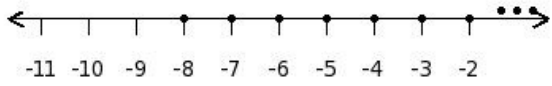
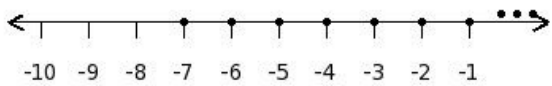
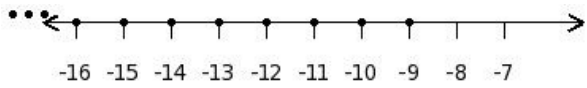
- (i) $\{-9, -8, -7, -6, -5\}$ (ii) $\{-9, -10, -11, -12, -13\}$ (iii) $\{-10, -11, -12, -13, -14\}$ (iv) $\{-8, -7, -6, -5, -4\}$ (v) $\{-9, -8, -7, -6\}$

8. Find the solution set for the given inequation

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

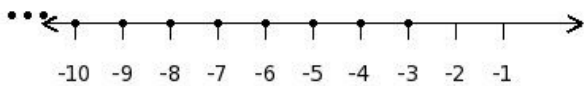
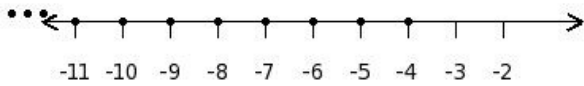
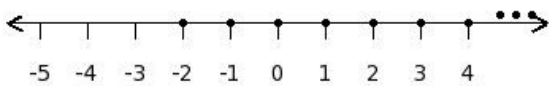
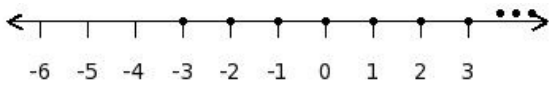
- (i) $\{3, 2, 1, 0, -1\}$ (ii) $\{4, 5, 6, 7, 8\}$ (iii) $\{4, 5, 6, 7\}$ (iv) $\{5, 6, 7, 8, 9\}$ (v) $\{4, 3, 2, 1, 0\}$

9. Identify the solution for the inequality $(7x+56) < 0, x \in \mathbb{Z}$



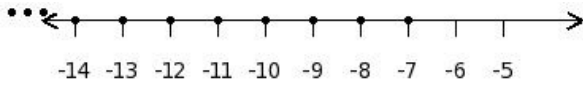
(i) I (ii) III (iii) IV (iv) II

10. Identify the solution for the inequality $(7x+21) > 0, x \in \mathbb{Z}$

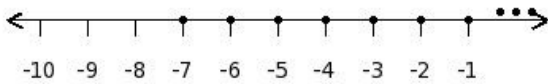


(i) I (ii) III (iii) IV (iv) II

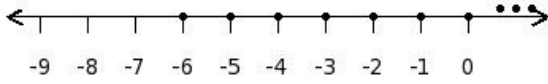
11. Identify the solution for the inequality $(6x+42) \leq 0, x \in \mathbb{Z}$



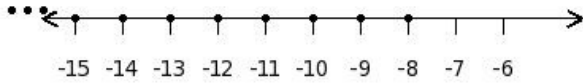
(I)



(II)



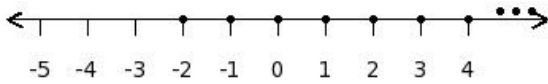
(III)



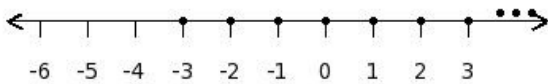
(IV)

(i) II (ii) III (iii) IV (iv) I

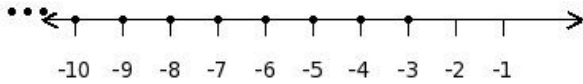
12. Identify the solution for the inequality $(9x+27) \geq 0, x \in \mathbb{Z}$



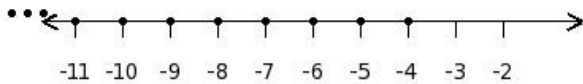
(I)



(II)



(III)



(IV)

(i) III (ii) II (iii) I (iv) IV

13. Which of the following is an inequation?

(i) $(5x+3)$ (ii) $(-3x-9) \geq 0, x \in \mathbb{Z}$ (iii) $(5x+5)=0$ (iv) 3

14. Which of the following is not an inequation?

(i) $(-x-7) < (-4), x \in \mathbb{Z}$ (ii) $(-9x+2)=0$ (iii) $(2x-1) \leq (-5), x \in \mathbb{Z}$ (iv) $(-2x-6) \geq (-6), x \in \mathbb{Z}$
 (v) $(-6x-9) > 3, x \in \mathbb{Z}$

15. Which of the following is not an inequation?

(i) $(7x-3) \geq (x+9), x \in \mathbb{Z}$ (ii) $(-4x-1) > (-9x-7), x \in \mathbb{Z}$ (iii) $(-3x-4) \leq (x-3), x \in \mathbb{Z}$
 (iv) $(8x+7) = (-x+4)$ (v) $(-4x-1) < (-5x-6), x \in \mathbb{Z}$

16. Which of the following inequations is the same as $(3x+7) < (-2x+8), x \in \mathbb{Z}$
- (i) $(3x+7) > (6x+9), x \in \mathbb{Z}$ (ii) $(11x+8) > (-2x+8), x \in \mathbb{Z}$ (iii) $(11x+8) < (6x+9), x \in \mathbb{Z}$
- (iv) $(3x+7) < (6x+9), x \in \mathbb{Z}$ (v) $(11x+8) < (-2x+8), x \in \mathbb{Z}$
-
17. Which of the following inequations is the same as $(8x+2) < (6x-7), x \in \mathbb{Z}$
- (i) $(8x+2) < (4x-11), x \in \mathbb{Z}$ (ii) $(6x-2) < (6x-7), x \in \mathbb{Z}$ (iii) $(6x-2) < (4x-11), x \in \mathbb{Z}$
- (iv) $(8x+2) > (4x-11), x \in \mathbb{Z}$ (v) $(6x-2) > (6x-7), x \in \mathbb{Z}$
-
18. Which of the following inequations is the same as $(6x-8) \leq (-4x-8), x \in \mathbb{Z}$
- (i) $(2x-5) < (-4x-8), x \in \mathbb{Z}$ (ii) $(6x-8) < (-8x-5), x \in \mathbb{Z}$ (iii) $(6x-8) > (-8x-5), x \in \mathbb{Z}$
- (iv) $(2x-5) \leq (-8x-5), x \in \mathbb{Z}$ (v) $(2x-5) > (-4x-8), x \in \mathbb{Z}$
-
19. Which of the following inequations is the same as $(2x+3) \leq (9x+7), x \in \mathbb{Z}$
- (i) $(10x-3) \leq (17x+1), x \in \mathbb{Z}$ (ii) $(2x+3) > (17x+1), x \in \mathbb{Z}$ (iii) $(2x+3) < (17x+1), x \in \mathbb{Z}$
- (iv) $(10x-3) > (9x+7), x \in \mathbb{Z}$ (v) $(10x-3) < (9x+7), x \in \mathbb{Z}$
-
20. Which of the following inequations is the same as $(9x+6) > (-6x-2), x \in \mathbb{Z}$
- (i) $(14x+12) > (-x+4), x \in \mathbb{Z}$ (ii) $(9x+6) < (-x+4), x \in \mathbb{Z}$ (iii) $(9x+6) > (-x+4), x \in \mathbb{Z}$
- (iv) $(14x+12) < (-6x-2), x \in \mathbb{Z}$ (v) $(14x+12) > (-6x-2), x \in \mathbb{Z}$
-
21. Which of the following inequations is the same as $(-5x-9) > (x-6), x \in \mathbb{Z}$
- (i) $(-6x-9) > (-6), x \in \mathbb{Z}$ (ii) $(-5x-9) < (-6), x \in \mathbb{Z}$ (iii) $(-6x-9) > (x-6), x \in \mathbb{Z}$
- (iv) $(-6x-9) < (x-6), x \in \mathbb{Z}$ (v) $(-5x-9) > (-6), x \in \mathbb{Z}$
-
22. Which of the following inequations is the same as $(2x-6) \geq (-x-6), x \in \mathbb{Z}$
- (i) $(7x-11) < (-x-6), x \in \mathbb{Z}$ (ii) $(7x-11) > (-x-6), x \in \mathbb{Z}$ (iii) $(2x-6) < (4x-11), x \in \mathbb{Z}$
- (iv) $(2x-6) > (4x-11), x \in \mathbb{Z}$ (v) $(7x-11) \geq (4x-11), x \in \mathbb{Z}$
-
23. Which of the following inequations is the same as $(-8x-9) \geq (-6x-2), x \in \mathbb{Z}$
- (i) $(-5x-5) \geq (-3x+2), x \in \mathbb{Z}$ (ii) $(-8x-9) < (-3x+2), x \in \mathbb{Z}$ (iii) $(-8x-9) > (-3x+2), x \in \mathbb{Z}$
- (iv) $(-5x-5) > (-6x-2), x \in \mathbb{Z}$ (v) $(-5x-5) < (-6x-2), x \in \mathbb{Z}$
-
24. Which of the following inequations is the same as $(8x+8) < (7x+2), x \in \mathbb{Z}$
- (i) $(-72x-72) > (-63x-18), x \in \mathbb{Z}$ (ii) $(-72x-72) > (7x+2), x \in \mathbb{Z}$ (iii) $(8x+8) < (-63x-18), x \in \mathbb{Z}$
- (iv) $(-72x-72) < (7x+2), x \in \mathbb{Z}$ (v) $(8x+8) > (-63x-18), x \in \mathbb{Z}$

25. Which of the following inequations is the same as
 $(3x-2) \leq (2x+3), x \in \mathbb{Z}$
 (i) $(18x-12) > (2x+3), x \in \mathbb{Z}$ (ii) $(18x-12) \leq (12x+18), x \in \mathbb{Z}$ (iii) $(18x-12) < (2x+3), x \in \mathbb{Z}$
 (iv) $(3x-2) < (12x+18), x \in \mathbb{Z}$ (v) $(3x-2) > (12x+18), x \in \mathbb{Z}$
-
26. Which of the following inequations is the same as
 $(-5x-4) > (-9x-5), x \in \mathbb{Z}$
 (i) $(-5x-4) < (-45x-25), x \in \mathbb{Z}$ (ii) $(-5x-4) > (-45x-25), x \in \mathbb{Z}$ (iii) $(-25x-20) > (-9x-5), x \in \mathbb{Z}$
 (iv) $(-25x-20) < (-9x-5), x \in \mathbb{Z}$ (v) $(-25x-20) > (-45x-25), x \in \mathbb{Z}$
-
27. Which of the following inequations is the same as
 $(-9x+2) \geq (-6x+2), x \in \mathbb{Z}$
 (i) $(-9x+2) > (-42x+14), x \in \mathbb{Z}$ (ii) $(-9x+2) < (-42x+14), x \in \mathbb{Z}$ (iii) $(-63x+14) < (-6x+2), x \in \mathbb{Z}$
 (iv) $(-63x+14) \geq (-42x+14), x \in \mathbb{Z}$ (v) $(-63x+14) > (-6x+2), x \in \mathbb{Z}$
-
28. Which of the following inequations is not the same as
 $(7x+8) < (6x+2), x \in \mathbb{Z}$
 (i) $(10x+16) < (9x+10), x \in \mathbb{Z}$ (ii) $(13x+7) < (7x+3), x \in \mathbb{Z}$ (iii) $(13x+7) < (12x+1), x \in \mathbb{Z}$
 (iv) $(9x+9) < (8x+3), x \in \mathbb{Z}$ (v) $(8x+9) < (7x+3), x \in \mathbb{Z}$
-
29. Which of the following inequations is not the same as
 $(-6x-4) < (8x-6), x \in \mathbb{Z}$
 (i) $(-4) < (16x-12), x \in \mathbb{Z}$ (ii) $(2x-10) < (16x-12), x \in \mathbb{Z}$ (iii) $(x-5) < (15x-7), x \in \mathbb{Z}$
 (iv) $(-4) < (14x-6), x \in \mathbb{Z}$ (v) $(-9x-7) < (5x-9), x \in \mathbb{Z}$
-
30. Which of the following inequations is not the same as
 $(-4x+4) \leq (-2x+3), x \in \mathbb{Z}$
 (i) $(-11x+9) \leq (-9x+8), x \in \mathbb{Z}$ (ii) $(-5x+9) \leq (-3x+8), x \in \mathbb{Z}$ (iii) $(x-5) \leq (-3x+8), x \in \mathbb{Z}$
 (iv) $(-10x+11) \leq (-8x+10), x \in \mathbb{Z}$ (v) $(x-5) \leq (3x-6), x \in \mathbb{Z}$
-
31. Which of the following inequations is not the same as
 $(8x-8) \leq (x-4), x \in \mathbb{Z}$
 (i) $(-x-16) \leq (-8x-12), x \in \mathbb{Z}$ (ii) $(11x-17) \leq (-x-3), x \in \mathbb{Z}$ (iii) $(6x-7) \leq (-x-3), x \in \mathbb{Z}$
 (iv) $(11x-17) \leq (4x-13), x \in \mathbb{Z}$ (v) $(14x-2) \leq (7x+2), x \in \mathbb{Z}$
-
32. Which of the following inequations is not the same as
 $(-x+2) > (4x-3), x \in \mathbb{Z}$
 (i) $(-8x+1) > (-3x-4), x \in \mathbb{Z}$ (ii) $(-7x-4) > (-2x-9), x \in \mathbb{Z}$ (iii) $(2x+6) > (7x+1), x \in \mathbb{Z}$
 (iv) $(-7x-4) > (-3x-4), x \in \mathbb{Z}$ (v) $(-2x-2) > (3x-7), x \in \mathbb{Z}$
-
33. Which of the following inequations is not the same as
 $(-6x+5) > (-4x+5), x \in \mathbb{Z}$
 (i) $(-8x+3) > (-6x+3), x \in \mathbb{Z}$ (ii) $(-1) > (-13x+4), x \in \mathbb{Z}$ (iii) $(-1) > (2x-1), x \in \mathbb{Z}$
 (iv) $(-x+10) > (x+10), x \in \mathbb{Z}$ (v) $(-15x+4) > (-13x+4), x \in \mathbb{Z}$

34. Which of the following inequations is not the same as $(9x+7) \geq (-9x+2), x \in \mathbb{Z}$
- (i) $(3x-2) \geq (-15x-7), x \in \mathbb{Z}$ (ii) $(16x+12) \geq (-2x+7), x \in \mathbb{Z}$ (iii) $(5x+14) \geq (-13x+9), x \in \mathbb{Z}$
- (iv) $(3x-2) \geq (-13x+9), x \in \mathbb{Z}$ (v) $(17x+12) \geq (-x+7), x \in \mathbb{Z}$

35. Which of the following inequations is not the same as $(8x-1) \geq (-4x+9), x \in \mathbb{Z}$
- (i) $(6x+2) \geq (-6x+12), x \in \mathbb{Z}$ (ii) $(17x-1) \geq (5x+9), x \in \mathbb{Z}$ (iii) $10x \geq (-2x+10), x \in \mathbb{Z}$
- (iv) $(14x-9) \geq (-2x+10), x \in \mathbb{Z}$ (v) $(14x-9) \geq (2x+1), x \in \mathbb{Z}$

36. The solution set of the inequality $(3x-8) < (-3x+6), x \in \mathbb{Z}$ is
- (i) $\{2,1,0,-1,-2,\dots\}$ (ii) $\{-5,-4,-3,-2,-1,\dots\}$ (iii) $\{3,4,5,6,7,\dots\}$ (iv) $\{-2,-3,-4,-5,-6,\dots\}$

37. The solution set of the inequality $(-6x+6) > (3x-5), x \in \mathbb{Z}$ is
- (i) $\{1,0,-1,-2,-3,\dots\}$ (ii) $\{0,-1,-2,-3,-4,\dots\}$ (iii) $\{2,3,4,5,6,\dots\}$

38. The solution set of the inequality $(-x+7) \leq (-3x+6), x \in \mathbb{Z}$ is
- (i) $\{4,5,6,7,8,\dots\}$ (ii) $\{-1,-2,-3,-4,-5,\dots\}$ (iii) $\{0,1,2,3,4,\dots\}$ (iv) $\{1,2,3,4,5,\dots\}$

39. The solution set of the inequality $(x-6) \geq (8x-7), x \in \mathbb{Z}$ is
- (i) $\{0,-1,-2,-3,-4,\dots\}$ (ii) $\{1,2,3,4,5,\dots\}$ (iii) $\{0,1,2,3,4,\dots\}$

40. The solution set of the inequality $(-8x+4) < (-2), x \in \mathbb{Z}$ is
- (i) $\{0,-1,-2,-3,-4,\dots\}$ (ii) $\{1,2,3,4,5,\dots\}$ (iii) $\{-1,-2,-3,-4,-5,\dots\}$

41. The solution set of the inequality $(x+6) > 6, x \in \mathbb{Z}$ is
- (i) $\{0,1,2,3,4,\dots\}$ (ii) $\{1,2,3,4,5,\dots\}$ (iii) $\{-1,-2,-3,-4,-5,\dots\}$ (iv) $\{1,0,-1,-2,-3,\dots\}$

42. The solution set of the inequality $(-9x+3) \leq (-1), x \in \mathbb{Z}$ is
- (i) $\{1,2,3,4,5,\dots\}$ (ii) $\{0,-1,-2,-3,-4,\dots\}$ (iii) $\{-4,-5,-6,-7,-8,\dots\}$ (iv) $\{0,1,2,3,4,\dots\}$

43. The solution set of the inequality $(-4x-4) \geq 0, x \in \mathbb{Z}$ is
- (i) $\{0,1,2,3,4,\dots\}$ (ii) $\{1,2,3,4,5,\dots\}$ (iii) $\{-2,-3,-4,-5,-6,\dots\}$ (iv) $\{-1,-2,-3,-4,-5,\dots\}$

44. The simplified form of the inequality $(4x-3) < 6, x \in \mathbb{Z}$ is
- (i) $x > 2, x \in \mathbb{Z}$ (ii) $x < 2, x \in \mathbb{Z}$ (iii) $x \geq \frac{5}{2}, x \in \mathbb{Z}$ (iv) $x < \frac{9}{4}, x \in \mathbb{Z}$ (v) $x \leq \frac{5}{2}, x \in \mathbb{Z}$

45. The simplified form of the inequality $(-7x-1) > 3, x \in \mathbb{Z}$ is
- (i) $x \geq (-\frac{5}{7}), x \in \mathbb{Z}$ (ii) $x < (-\frac{3}{7}), x \in \mathbb{Z}$ (iii) $x < (-\frac{4}{7}), x \in \mathbb{Z}$ (iv) $x > (-\frac{3}{7}), x \in \mathbb{Z}$ (v) $x \leq (-\frac{5}{7}), x \in \mathbb{Z}$

46. The simplified form of the inequality $(2x+7) \leq 4, x \in \mathbb{Z}$ is
- (i) $x < (-2), x \in \mathbb{Z}$ (ii) $x > (-2), x \in \mathbb{Z}$ (iii) $x \leq (-\frac{3}{2}), x \in \mathbb{Z}$ (iv) $x \geq (-1), x \in \mathbb{Z}$ (v) $x \leq (-1), x \in \mathbb{Z}$

47. The simplified form of the inequality $(6x+3) \geq (-3)$, $x \in \mathbb{Z}$ is

- (i) $x \geq (-\frac{5}{6})$, $x \in \mathbb{Z}$ (ii) $x > (-\frac{7}{6})$, $x \in \mathbb{Z}$ (iii) $x \leq (-\frac{5}{6})$, $x \in \mathbb{Z}$ (iv) $x \geq (-1)$, $x \in \mathbb{Z}$ (v) $x < (-\frac{7}{6})$, $x \in \mathbb{Z}$

48. The simplified form of the inequality $(-x) < (4x-1)$, $x \in \mathbb{Z}$ is

- (i) $x \leq 0$, $x \in \mathbb{Z}$ (ii) $x > \frac{2}{5}$, $x \in \mathbb{Z}$ (iii) $x > \frac{1}{5}$, $x \in \mathbb{Z}$ (iv) $x < \frac{2}{5}$, $x \in \mathbb{Z}$ (v) $x \geq 0$, $x \in \mathbb{Z}$

49. The simplified form of the inequality $(5x+7) > (9x+1)$, $x \in \mathbb{Z}$ is

- (i) $x > \frac{7}{4}$, $x \in \mathbb{Z}$ (ii) $x \leq \frac{5}{4}$, $x \in \mathbb{Z}$ (iii) $x < \frac{7}{4}$, $x \in \mathbb{Z}$ (iv) $x < \frac{3}{2}$, $x \in \mathbb{Z}$ (v) $x \geq \frac{5}{4}$, $x \in \mathbb{Z}$

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

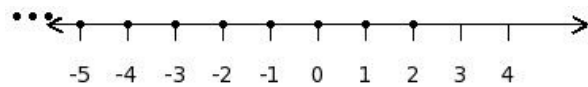
- (i) $x < (-2)$, $x \in \mathbb{Z}$ (ii) $x \geq (-\frac{9}{4})$, $x \in \mathbb{Z}$ (iii) $x \leq (-\frac{5}{2})$, $x \in \mathbb{Z}$ (iv) $x \geq (-\frac{5}{2})$, $x \in \mathbb{Z}$ (v) $x > (-2)$, $x \in \mathbb{Z}$

51. The simplified form of the inequality $(-6x+6) \geq (-8x+7)$, $x \in \mathbb{Z}$ is

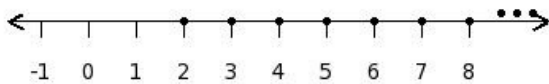
- (i) $x \leq 1$, $x \in \mathbb{Z}$ (ii) $x \geq \frac{1}{2}$, $x \in \mathbb{Z}$ (iii) $x \geq 1$, $x \in \mathbb{Z}$ (iv) $x > 0$, $x \in \mathbb{Z}$ (v) $x < 0$, $x \in \mathbb{Z}$

52. Which of the following figures represents the solution set

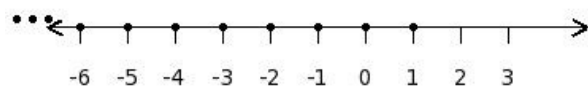
$\{1, 0, -1, -2, -3, -4, \dots\}$



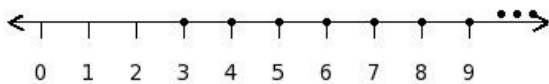
(I)



(II)



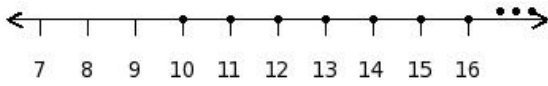
(III)



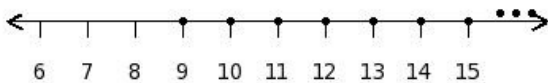
(IV)

- (i) I (ii) IV (iii) III (iv) II

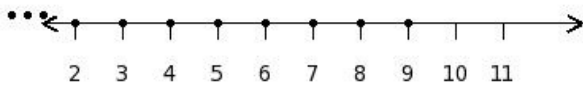
53. Which of the following figures represents the solution set $\{10,11,12,13,14,15,\dots\}$



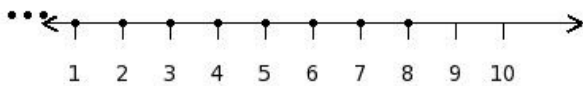
(I)



(II)



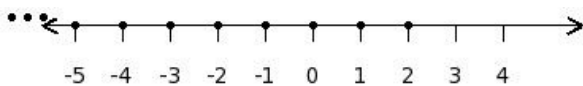
(III)



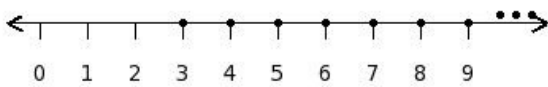
(IV)

- (i) III (ii) IV (iii) II (iv) I

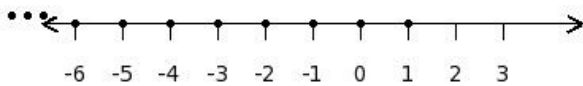
54. Which of the following figures represents the solution set $\{2,1,0,-1,-2,-3,\dots\}$



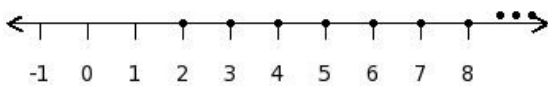
(I)



(II)



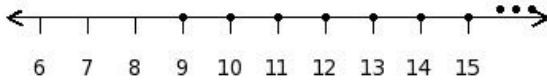
(III)



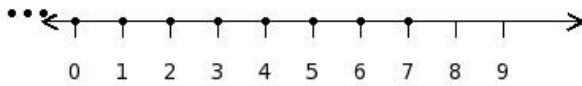
(IV)

- (i) IV (ii) III (iii) II (iv) I

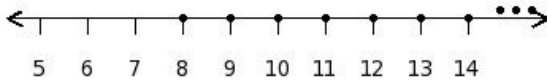
55. Which of the following figures represents the solution set $\{8,9,10,11,12,13,\dots\}$



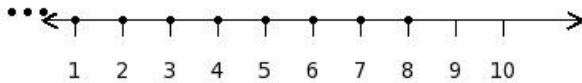
(I)



(II)



(III)



(IV)

- (i) I (ii) IV (iii) III (iv) II

56. Which of the following statements are true?

- Dividing same negative number on both sides does not change the inequality
- Multiplying same negative number on both sides does not change the inequality
- Multiplying same positive number on both sides does not change the inequality
- Adding same number on both sides does not change the inequality
- Dividing same positive number on both sides does not change the inequality
- Subtracting same number on both sides does not change the inequality

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

57. Which of the following inequations is not the same as $7x < (x+5), x \in \mathbb{Z}$

- (i) $(-56x) > (-8x-40), x \in \mathbb{Z}$ (ii) $21x < (3x+15), x \in \mathbb{Z}$ (iii) $(-49x) < (3x+15), x \in \mathbb{Z}$
 (iv) $(-49x) > (-7x-35), x \in \mathbb{Z}$ (v) $(-21x) > (-3x-15), x \in \mathbb{Z}$

58. Which of the following inequations is not the same as $(4x-2) \leq (-9x+8), x \in \mathbb{Z}$

- (i) $(12x-6) \leq (-27x+24), x \in \mathbb{Z}$ (ii) $(-28x+14) \geq (63x-56), x \in \mathbb{Z}$ (iii) $(-4x+2) \geq (9x-8), x \in \mathbb{Z}$
 (iv) $(-28x+14) \leq (-27x+24), x \in \mathbb{Z}$ (v) $(-8x+4) \geq (18x-16), x \in \mathbb{Z}$

59. Which of the following inequations is not the same as $(5x+6) > (2x-7), x \in \mathbb{Z}$

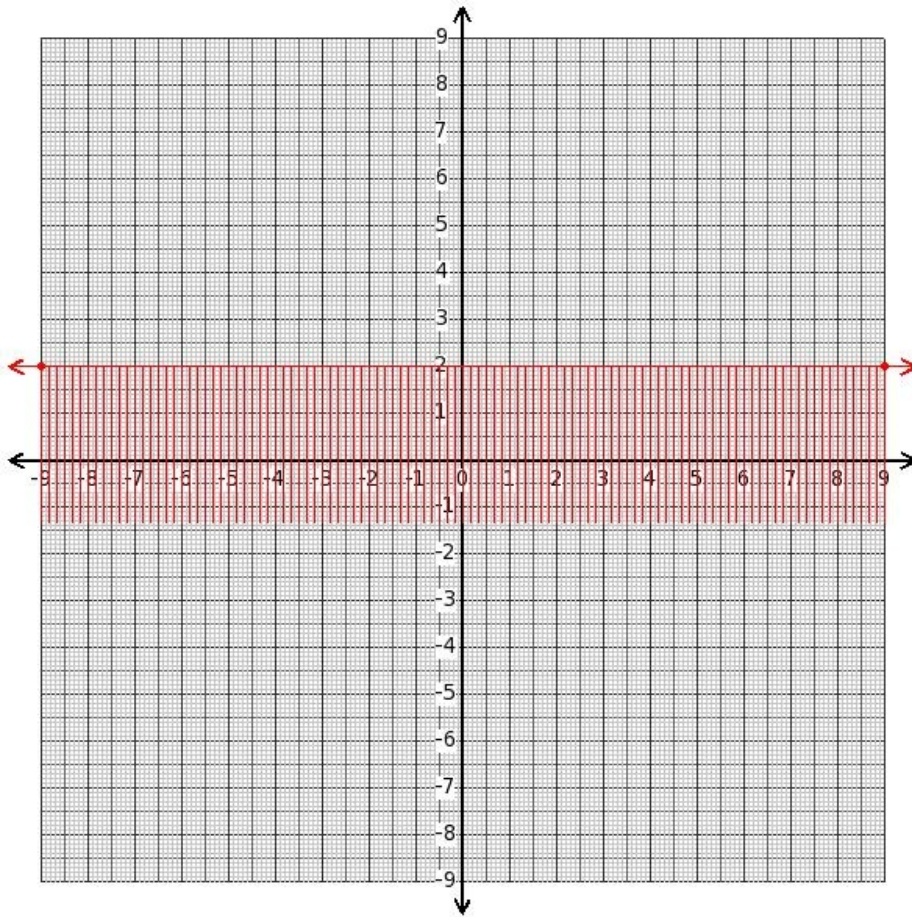
- (i) $(-20x-24) > (18x-63), x \in \mathbb{Z}$ (ii) $(35x+42) > (14x-49), x \in \mathbb{Z}$ (iii) $(-20x-24) < (-8x+28), x \in \mathbb{Z}$
 (iv) $(45x+54) > (18x-63), x \in \mathbb{Z}$ (v) $(20x+24) > (8x-28), x \in \mathbb{Z}$

60. Which of the following inequations is not the same as $(5x+6) \geq (9x+4), x \in \mathbb{Z}$

- (i) $(25x+30) \geq (45x+20), x \in \mathbb{Z}$ (ii) $(-35x-42) \leq (-63x-28), x \in \mathbb{Z}$ (iii) $(10x+12) \geq (18x+8), x \in \mathbb{Z}$
 (iv) $(15x+18) \geq (27x+12), x \in \mathbb{Z}$ (v) $(15x+18) \geq (-63x-28), x \in \mathbb{Z}$

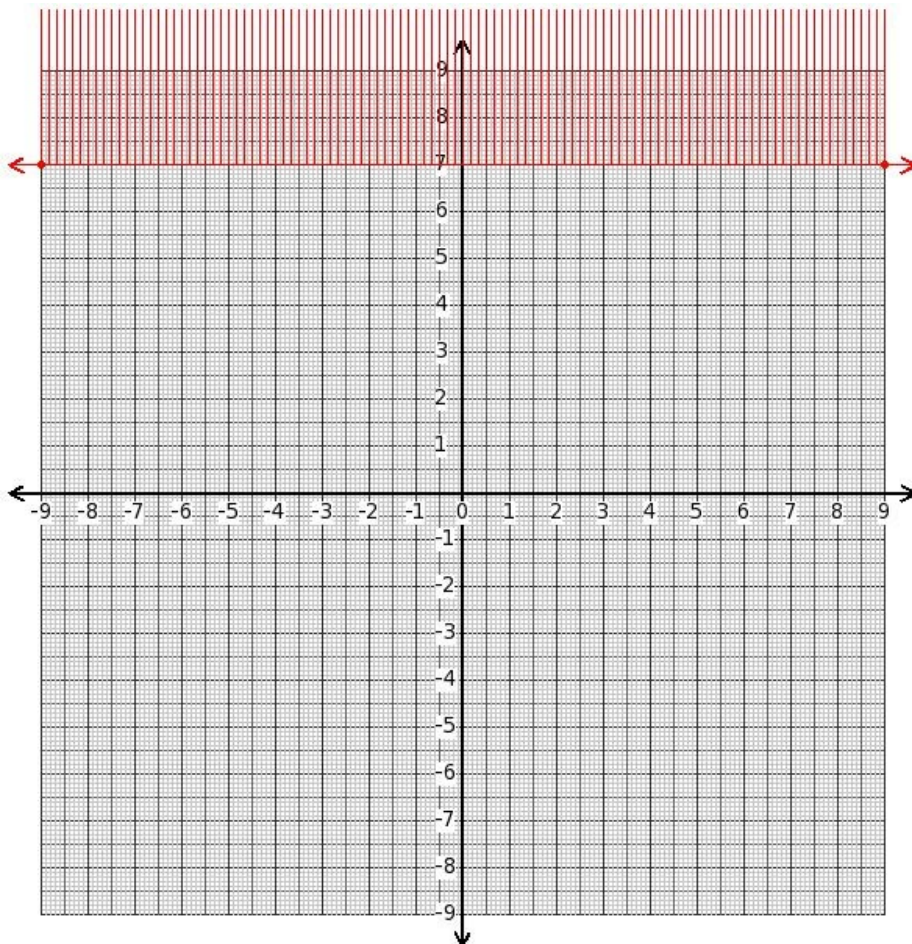
61. Find the solution set of given inequality
 $(-7x+63) < 0, x \in \mathbb{Z}$
 (i) $\{9,8,7,6,\dots\}$ (ii) $\{9,10,11,12,\dots\}$ (iii) $\{8,7,6,5,\dots\}$ (iv) $\{10,11,12,13,\dots\}$
62. Find the solution set of given inequality
 $(8x-72) > 0, x \in \mathbb{Z}$
 (i) $\{9,8,7,6,\dots\}$ (ii) $\{10,11,12,13,\dots\}$ (iii) $\{8,7,6,5,\dots\}$ (iv) $\{9,10,11,12,\dots\}$
63. Find the solution set of given inequality
 $(-3x+3) \leq 0, x \in \mathbb{Z}$
 (i) $\{1,0,-1,-2,\dots\}$ (ii) $\{2,3,4,5,\dots\}$ (iii) $\{1,2,3,4,\dots\}$ (iv) $\{0,-1,-2,-3,\dots\}$
64. Find the solution set of given inequality
 $(2x-2) \geq 0, x \in \mathbb{Z}$
 (i) $\{1,2,3,4,\dots\}$ (ii) $\{2,3,4,5,\dots\}$ (iii) $\{1,0,-1,-2,\dots\}$ (iv) $\{0,-1,-2,-3,\dots\}$
65. Find the solution set of $(-2) < (-7x+7) < 25, x \in \mathbb{Z}$
 (i) $\{0,-1,-2,-3\}$ (ii) $\{-1,-2,-3,-4\}$ (iii) $\{2,1,0,-1\}$ (iv) $\{3,2,1,0\}$ (v) $\{1,0,-1,-2\}$
66. Find the solution set of $10 > (7x-8) > (-17), x \in \mathbb{Z}$
 (i) $\{2,1,0,-1\}$ (ii) $\{1,0,-1,-2\}$ (iii) $\{0,-1,-2,-3\}$ (iv) $\{3,2,1,0\}$ (v) $\{4,3,2,1\}$
67. Find the solution set of $11 \leq (5x-3) \leq 26, x \in \mathbb{Z}$
 (i) $\{4,5,6\}$ (ii) $\{1,2,3\}$ (iii) $\{3,4,5\}$ (iv) $\{2,3,4\}$ (v) $\{5,6,7\}$
68. Find the solution set of $(-1) \geq (x-6) \geq (-12), x \in \mathbb{Z}$
 (i) $\{6,5,4,3,2,1,0,-1,-2,-3,-4,-5\}$ (ii) $\{7,6,5,4,3,2,1,0,-1,-2,-3,-4\}$ (iii) $\{3,2,1,0,-1,-2,-3,-4,-5,-6,-7,-8\}$
 (iv) $\{5,4,3,2,1,0,-1,-2,-3,-4,-5,-6\}$ (v) $\{4,3,2,1,0,-1,-2,-3,-4,-5,-6,-7\}$
69. Find the solution set of $(-5) < (-5x+2) \leq 20, x \in \mathbb{Z}$
 (i) $\{3,2,1,0,-1\}$ (ii) $\{-1,-2,-3,-4,-5\}$ (iii) $\{0,-1,-2,-3,-4\}$ (iv) $\{1,0,-1,-2,-3\}$ (v) $\{2,1,0,-1,-2\}$
70. Find the solution set of $9 > (4x-9) \geq (-15), x \in \mathbb{Z}$
 (i) $\{2,1,0,-1,-2,-3\}$ (ii) $\{6,5,4,3,2,1\}$ (iii) $\{3,2,1,0,-1,-2\}$ (iv) $\{4,3,2,1,0,-1\}$ (v) $\{5,4,3,2,1,0\}$
71. Find the solution set of $1 \leq (2x+2) < 9, x \in \mathbb{Z}$
 (i) $\{2,3,4,5\}$ (ii) $\{-2,-1,0,1\}$ (iii) $\{0,1,2,3\}$ (iv) $\{-1,0,1,2\}$ (v) $\{1,2,3,4\}$
72. Find the solution set of $3 \geq (2x-4) > (-9), x \in \mathbb{Z}$
 (i) $\{3,2,1,0,-1,-2\}$ (ii) $\{2,1,0,-1,-2,-3\}$ (iii) $\{1,0,-1,-2,-3,-4\}$ (iv) $\{4,3,2,1,0,-1\}$ (v) $\{5,4,3,2,1,0\}$

73. Which of the following inequations represent the shaded region?



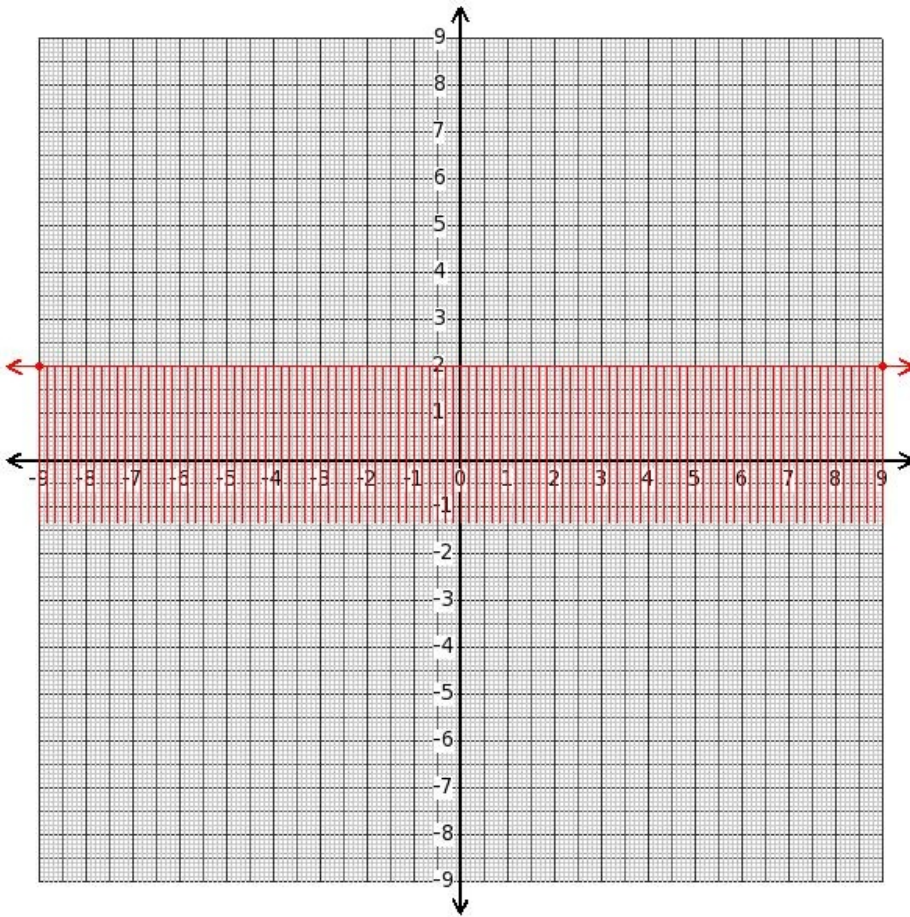
- (i) $(y+5)<0$ (ii) $(y-7)<0$ (iii) $(y+4)<0$ (iv) $(y-9)<0$ (v) $(y-2)<0$

74. Which of the following inequations represent the shaded region?



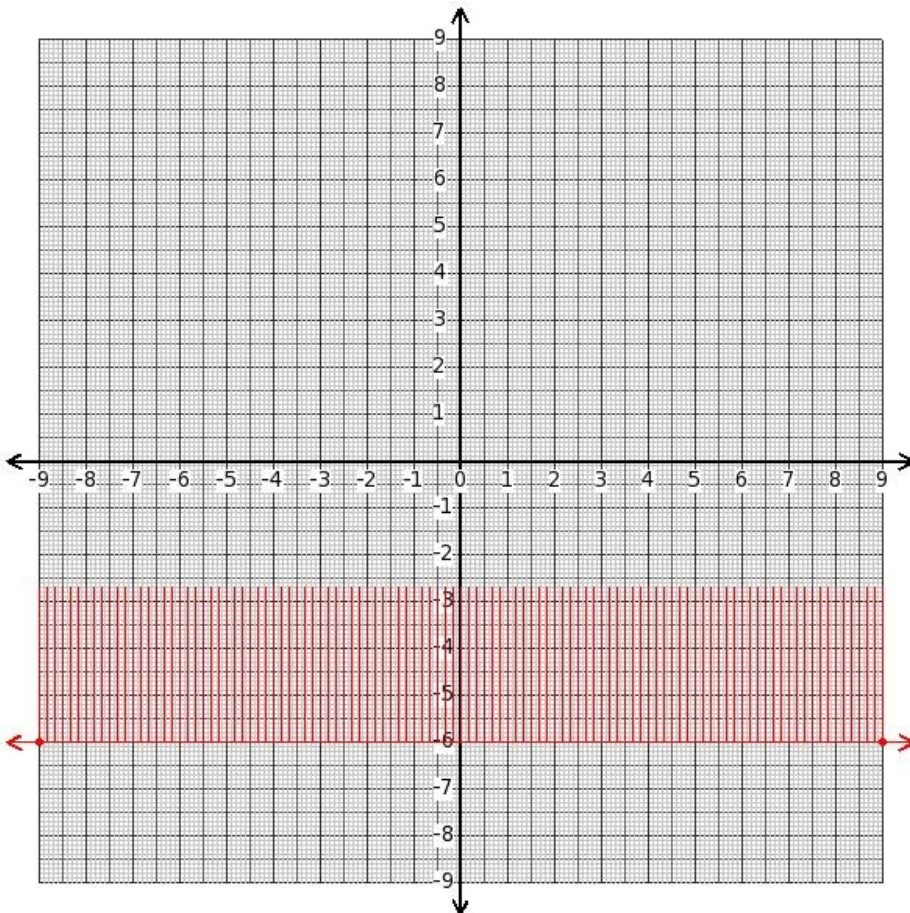
- (i) $(y+9)>0$ (ii) $(y+4)>0$ (iii) $(y-7)>0$ (iv) $(y-5)>0$ (v) $(y+1)>0$

75. Which of the following inequations represent the shaded region?



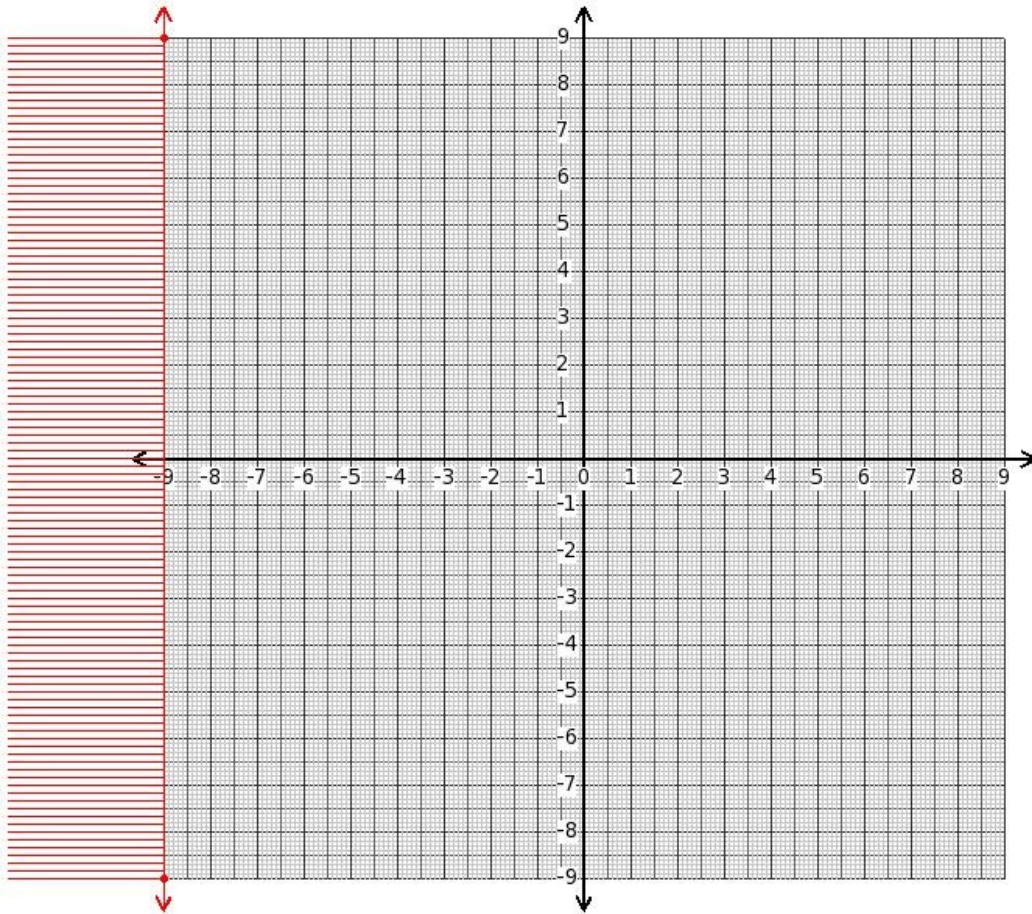
- (i) $(y-1) \leq 0$ (ii) $(y-5) \leq 0$ (iii) $(y+6) \leq 0$ (iv) $(y-2) \leq 0$ (v) $(y+2) \leq 0$

76. Which of the following inequations represent the shaded region?



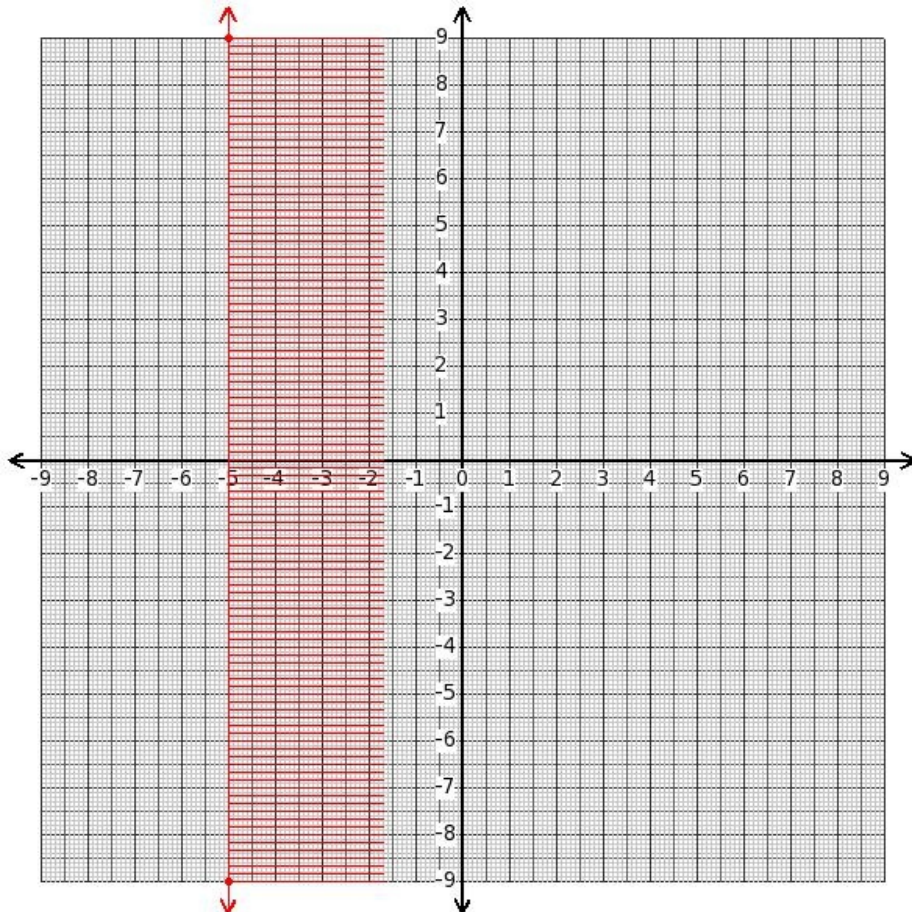
- (i) $(y-2) \geq 0$ (ii) $(y-3) \geq 0$ (iii) $(y+6) \geq 0$ (iv) $(y-5) \geq 0$ (v) $(y-8) \geq 0$

77. Which of the following inequations represent the shaded region?



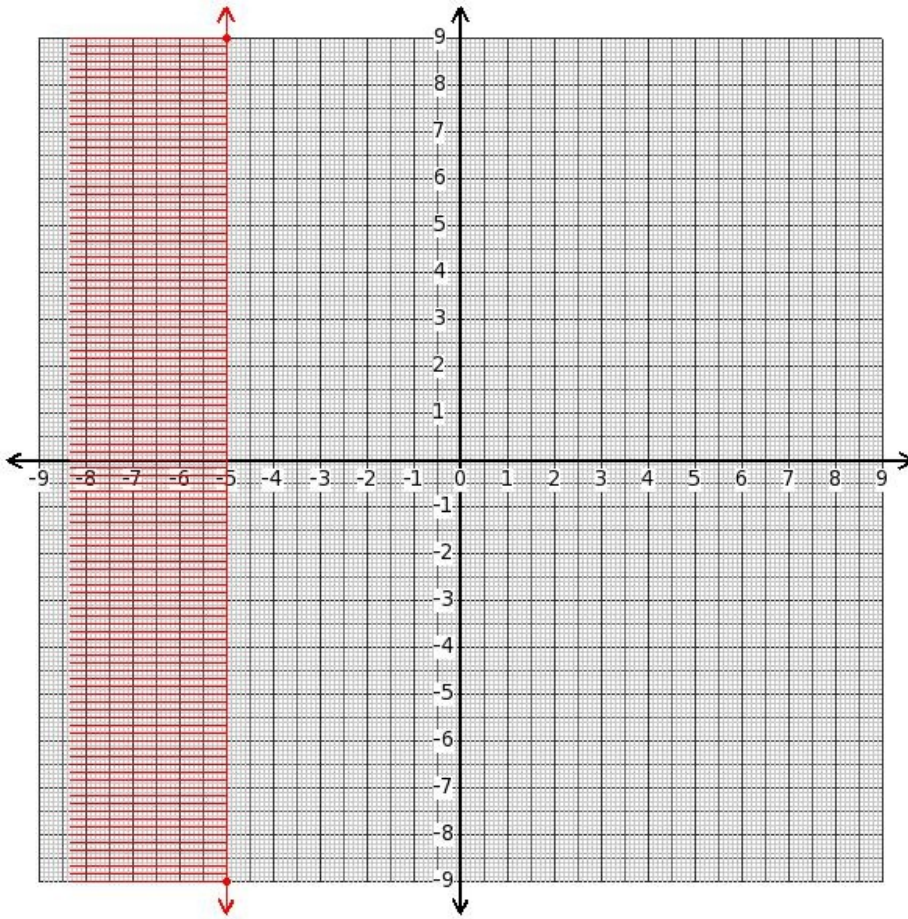
- (i) $x < 0$ (ii) $(x-4) < 0$ (iii) $(x-6) < 0$ (iv) $(x-2) < 0$ (v) $(x+9) < 0$

78. Which of the following inequations represent the shaded region?



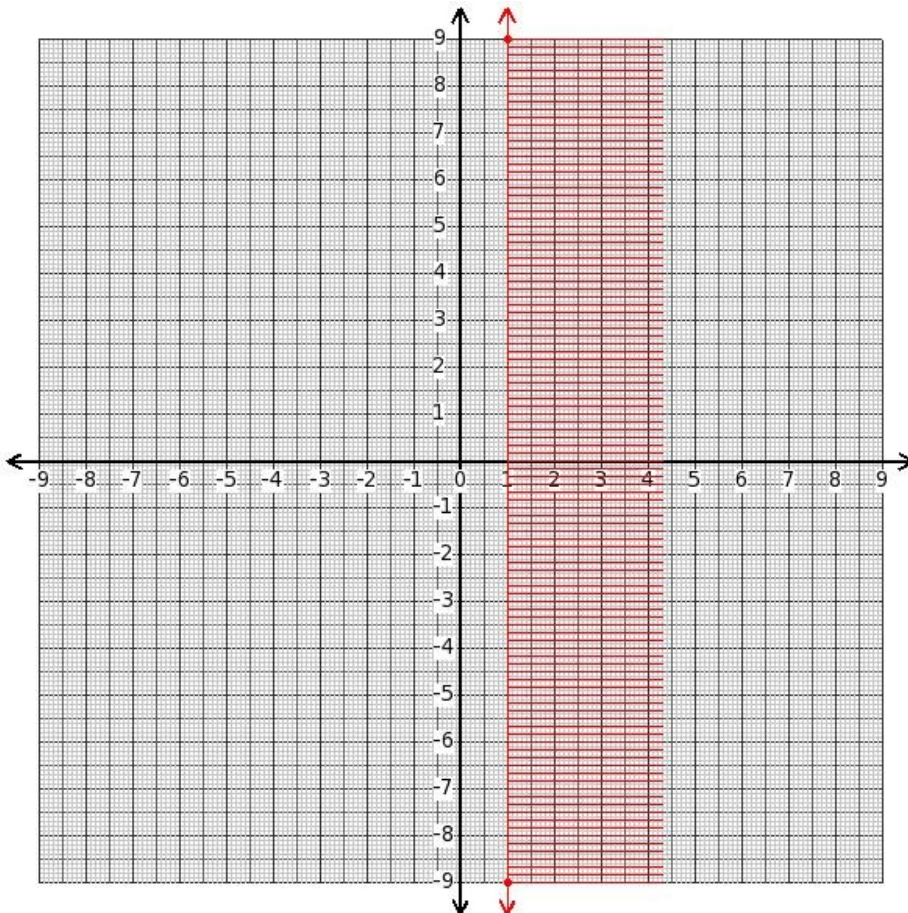
- (i) $(x+5) > 0$ (ii) $(x+7) > 0$ (iii) $(x-9) > 0$ (iv) $(x+9) > 0$

79. Which of the following inequations represent the shaded region?



- (i) $(x-5) \leq 0$ (ii) $(x+4) \leq 0$ (iii) $(x-6) \leq 0$ (iv) $(x+5) \leq 0$ (v) $(x+8) \leq 0$

80. Which of the following inequations represent the shaded region?



- (i) $(x-1) \geq 0$ (ii) $(x+5) \geq 0$ (iii) $(x+6) \geq 0$ (iv) $(x+1) \geq 0$ (v) $(x+8) \geq 0$

Assignment Key

| | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1) (iv) | 2) (ii) | 3) (iii) | 4) (i) | 5) (iii) | 6) (ii) |
| 7) (v) | 8) (iii) | 9) (i) | 10) (iv) | 11) (iv) | 12) (ii) |
| 13) (ii) | 14) (ii) | 15) (iv) | 16) (iii) | 17) (iii) | 18) (iv) |
| 19) (i) | 20) (i) | 21) (i) | 22) (v) | 23) (i) | 24) (i) |
| 25) (ii) | 26) (v) | 27) (iv) | 28) (ii) | 29) (i) | 30) (iii) |
| 31) (ii) | 32) (iv) | 33) (ii) | 34) (iv) | 35) (iv) | 36) (i) |
| 37) (i) | 38) (ii) | 39) (i) | 40) (ii) | 41) (ii) | 42) (i) |
| 43) (iv) | 44) (iv) | 45) (iii) | 46) (iii) | 47) (iv) | 48) (iii) |
| 49) (iv) | 50) (ii) | 51) (ii) | 52) (iii) | 53) (iv) | 54) (iv) |
| 55) (iii) | 56) (iii) | 57) (iii) | 58) (iv) | 59) (i) | 60) (v) |
| 61) (iv) | 62) (ii) | 63) (iii) | 64) (i) | 65) (v) | 66) (i) |
| 67) (iii) | 68) (iv) | 69) (iv) | 70) (iv) | 71) (iii) | 72) (i) |
| 73) (v) | 74) (iii) | 75) (iv) | 76) (iii) | 77) (v) | 78) (i) |
| 79) (iv) | 80) (i) | | | | |