



1. Which of the following inequations is not the same as

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

- (i) $(3x-7) \geq (5x-9), x \in \mathbb{Z}$ (ii) $(4x-1) \geq (4x-12), x \in \mathbb{Z}$ (iii) $(-8x+2) \geq (-6x), x \in \mathbb{Z}$
(iv) $(4x-1) \geq (6x-3), x \in \mathbb{Z}$ (v) $(2x-10) \geq (4x-12), x \in \mathbb{Z}$

2. The simplified form of the inequality $(5x+1) < (3x-8), x \in \mathbb{Z}$ is

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

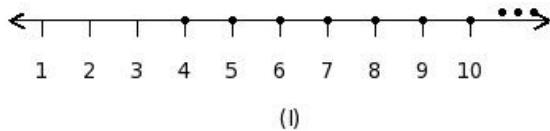
3. Solve the inequation $(5x-15) \leq 0, x \in \mathbb{Z}$

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

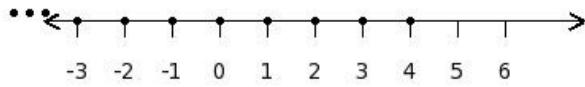
4. The solution set of the inequality $(7x+5) \geq (x-9), x \in \mathbb{Z}$ is

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

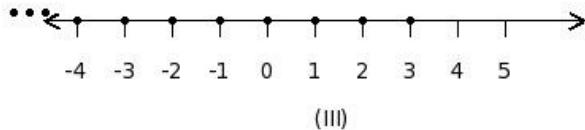
5. Identify the solution for the inequality $(5x-20) > 0, x \in \mathbb{Z}$



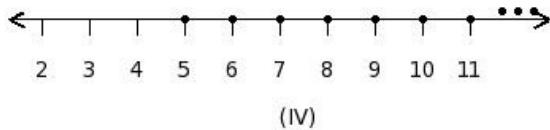
(I)



(II)



(III)



(IV)

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

6. Solve the inequation $(-5x-25) < 0, x \in \mathbb{Z}$

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

7. Find the solution set of $(-4) \geq (x-9) \geq (-15), x \in \mathbb{Z}$

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

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

- (i) $x > (-12), x \in \mathbb{Z}$ (ii) $x \geq (-14), x \in \mathbb{Z}$ (iii) $x < (-12), x \in \mathbb{Z}$ (iv) $x \geq (-13), x \in \mathbb{Z}$ (v) $x \leq (-14), x \in \mathbb{Z}$

9. Which of the following inequations is not the same as

$(-x+3) \geq (-4x-8), x \in \mathbb{Z}$

- (i) $(-9x+27) \geq (-36x-72), x \in \mathbb{Z}$ (ii) $(-2x+6) \geq (-8x-16), x \in \mathbb{Z}$ (iii) $(-3x+9) \geq (-12x-24), x \in \mathbb{Z}$
(iv) $(3x-9) \geq (-8x-16), x \in \mathbb{Z}$ (v) $(3x-9) \leq (12x+24), x \in \mathbb{Z}$

10. Which of the following inequations is the same as

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

- (i) $(-6x) > (-6x+12), x \in \mathbb{Z}$ (ii) $(-5x+5) \leq (-6x+12), x \in \mathbb{Z}$ (iii) $(-5x+5) > (-7x+7), x \in \mathbb{Z}$
(iv) $(-5x+5) < (-7x+7), x \in \mathbb{Z}$ (v) $(-6x) < (-6x+12), x \in \mathbb{Z}$

11. Find the solution set of $6 \geq (-2x+4) > (-2), x \in \mathbb{Z}$

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

12. Which of the following inequations is the same as

$(-9x-8) \leq (-5x-2), x \in \mathbb{Z}$

- (i) $(81x+72) \geq (45x+18), x \in \mathbb{Z}$ (ii) $(-9x-8) > (45x+18), x \in \mathbb{Z}$ (iii) $(81x+72) > (-5x-2), x \in \mathbb{Z}$
(iv) $(81x+72) < (-5x-2), x \in \mathbb{Z}$ (v) $(-9x-8) < (45x+18), x \in \mathbb{Z}$

13. Which of the following inequations is the same as

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

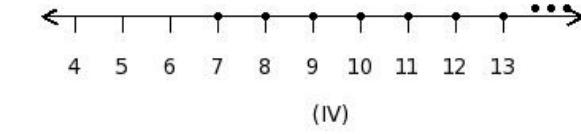
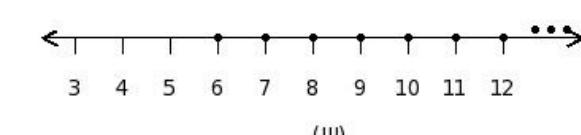
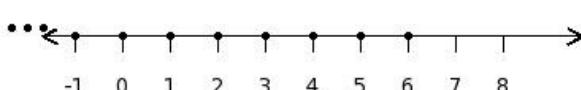
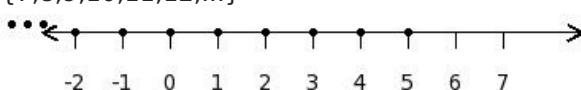
- (i) $(8x-56) > (-9x-8), x \in \mathbb{Z}$ (ii) $(-x+7) > (72x+64), x \in \mathbb{Z}$ (iii) $(8x-56) > (72x+64), x \in \mathbb{Z}$
(iv) $(-x+7) < (72x+64), x \in \mathbb{Z}$ (v) $(8x-56) < (-9x-8), x \in \mathbb{Z}$

14. Find the solution set of $(-8) < (-9x-9) < 21, x \in \mathbb{Z}$

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

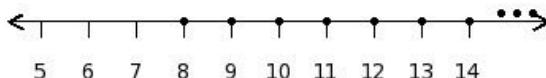
15. Which of the following figures represents the solution set

{7, 8, 9, 10, 11, 12, ...}

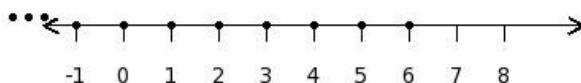


- (i) IV (ii) II (iii) I (iv) III

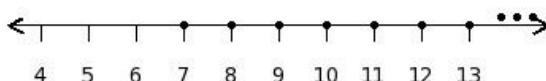
16. Which of the following figures represents the solution set
 $\{7, 8, 9, 10, 11, 12, \dots\}$



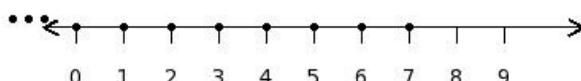
(I)



(II)



(III)



(IV)

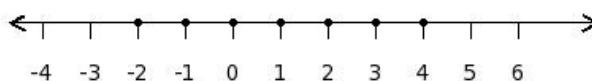
- (i) III (ii) II (iii) IV (iv) I

17. Identify the solution for the inequality

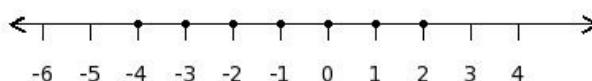
$$6 > (3x - 9) > (-17), x \in \mathbb{Z}$$



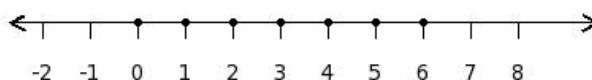
(I)



(II)



(III)



(IV)

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

18. Which of the following inequations is not the same as
 $(-4x + 2) \leq (-8x + 6), x \in \mathbb{Z}$

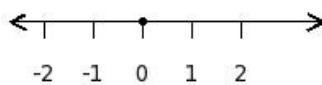
- (i) $(5x + 11) \leq (x + 15), x \in \mathbb{Z}$ (ii) $(-13x + 10) \leq (-17x + 14), x \in \mathbb{Z}$ (iii) $(-2x + 8) \leq (-17x + 14), x \in \mathbb{Z}$
 (iv) $(-6x + 8) \leq (-10x + 12), x \in \mathbb{Z}$ (v) $(-2x + 8) \leq (-6x + 12), x \in \mathbb{Z}$

19. Identify the solution for the inequality

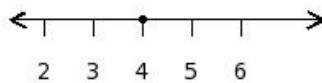
$$(-11) \geq (-9x) > (-22), x \in \mathbb{Z}$$



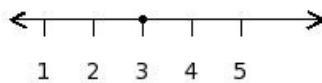
(I)



(II)



(III)



(IV)

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

20. Which of the following inequations is not the same as

$$(x+8) \leq (-7x+2), x \in \mathbb{Z}$$

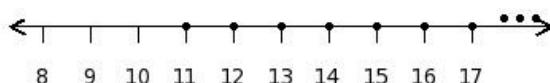
- (i) $(-7x-56) \geq (49x-14), x \in \mathbb{Z}$ (ii) $(-6x-48) \leq (49x-14), x \in \mathbb{Z}$ (iii) $(-6x-48) \geq (42x-12), x \in \mathbb{Z}$
(iv) $(2x+16) \leq (-14x+4), x \in \mathbb{Z}$ (v) $(5x+40) \leq (-35x+10), x \in \mathbb{Z}$

21. Which of the following is an inequation?

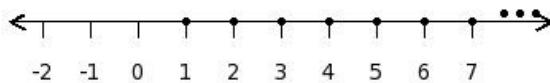
- (i) $(7x+1) < 0, x \in \mathbb{Z}$ (ii) $(x+3) = 0$ (iii) $(9x+7)$ (iv) 4

22. Identify the solution for the inequality

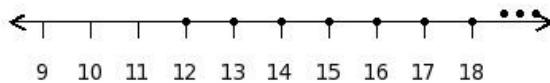
$$(-2x-16) \leq 0, x \in \mathbb{N}$$



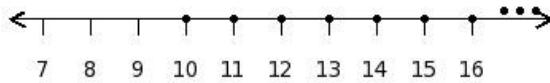
(I)



(II)



(III)



(IV)

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

23. Find the solution set of given inequality

$$(-7x+28) > 0, x \in \mathbb{Z}$$

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

Which of the following inequations is the same as

24. $(-4x+3) > (-7x+3), x \in \mathbb{Z}$

- (i) $(-4x+3) > (-4x-6), x \in \mathbb{Z}$ (ii) $(-4x+3) < (-4x-6), x \in \mathbb{Z}$ (iii) $(-x-6) > (-7x+3), x \in \mathbb{Z}$
(iv) $(-x-6) > (-4x-6), x \in \mathbb{Z}$ (v) $(-x-6) < (-7x+3), x \in \mathbb{Z}$

Solve the inequation $(-2x-6) \geq 0, x \in \mathbb{Z}$

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

Assignment Key

1) (ii)	2) (ii)	3) (iv)	4) (ii)	5) (i)	6) (iii)
7) (i)	8) (iv)	9) (iv)	10) (ii)	11) (iii)	12) (i)
13) (iii)	14) (ii)	15) (i)	16) (i)	17) (iv)	18) (iii)
19) (ii)	20) (ii)	21) (i)	22) (iv)	23) (ii)	24) (iv)
25) (iii)					

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