EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Inequations

Grade : ICSE Grade VII

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1. The solution set of the inequality $(-5x-9)>(-9), x\in Z$ is

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

2. Which of the following inequations is the same as $(-5x-1)<(7x-4), x\in Z$

   (i) $(-9x-8)<(3x-11), x\in Z$ (ii) $(-5x-1)<(3x-11), x\in Z$ (iii) $(-5x-1)>(3x-11), x\in Z$

   (iv) $(-9x-8)<(7x-4), x\in Z$ (v) $(-9x-8)>(7x-4), x\in Z$

3. Which of the following is not an inequation?

   (i) $(5x-4)<(-6x-5), x\in Z$ (ii) $(-6x-7)\leq(5x-3), x\in Z$ (iii) $(-7x+4)\geq(5x+7), x\in Z$

   (iv) $(-6x-8)=(5x+1)$ (v) $(6x-7)>(-x+3), x\in Z$

4. Which of the following inequations is the same as $(-4x+1)>(-2x), x\in Z$

   (i) $(-5x-2)>(-3x-3), x\in Z$ (ii) $(-5x-2)>(-2x), x\in Z$ (iii) $(-5x-2)<(-2x), x\in Z$

   (iv) $(-4x+1)<(-3x-3), x\in Z$ (v) $(-4x+1)>(-3x-3), x\in Z$

5. The simplified form of the inequality $(-5x+7)<(-6), x\in Z$ is

   (i) $x\leq\frac{12}{5}, x\in Z$ (ii) $x\geq\frac{12}{5}, x\in Z$ (iii) $x>\frac{14}{5}, x\in Z$ (iv) $x>\frac{13}{5}, x\in Z$ (v) $x<\frac{14}{5}, x\in Z$

6. Which of the following inequations is the same as $(8x-9)\leq(-5x+3), x\in Z$

   (i) $(10x-16)>(-5x+3), x\in Z$ (ii) $(10x-16)\leq(-3x-4), x\in Z$ (iii) $(10x-16)<(-5x+3), x\in Z$

   (iv) $(8x-9)<(-3x-4), x\in Z$ (v) $(8x-9)>(-3x-4), x\in Z$

7. Which of the following inequations is not the same as $(x+4)\leq(-8x-3), x\in Z$

   (i) $(2x+8)\leq(-16x-6), x\in Z$ (ii) $(9x+36)\leq(-72x-27), x\in Z$ (iii) $(5x+20)\leq(-40x-15), x\in Z$

   (iv) $(5x+20)\leq(-16x-6), x\in Z$ (v) $(x+4)\leq(-8x-3), x\in Z$

8. Find the solution set of $15<6x\leq29, x\in Z$

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

9. The solution set of the inequality $(5x-5)\leq(x-1), x\in Z$ is

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

10. Which of the following inequations is not the same as $(-3x+7)>(-x-9), x\in Z$

(i) $(6x-14)<(2x+18), x\in Z$ (ii) $(18x-42)>(-7x-63), x\in Z$ (iii) $(12x-28)<(4x+36), x\in Z$

(iv) $(18x-42)<(6x+54), x\in Z$ (v) $(-21x+49)>(-7x-63), x\in Z$

11. Which of the following inequations is the same as $(2x+7)<8x, x\in Z$

(i) $9<8x, x\in Z$ (ii) $(2x+7)>(6x+2), x\in Z$ (iii) $(2x+7)<(6x+2), x\in Z$ (iv) $9<(6x+2), x\in Z$

(v) $9>8x, x\in Z$

12. Which of the following is an inequation?

(i) $(3x+5)=0$ (ii) 6 (iii) $(4x+6)$ (iv) $(8x-3)<0, x\in Z$

13. The solution set of the inequality $(-4x-7)\leq 6, x\in Z$ is

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

14. Solve the inequation $(-8x-16)\leq 0, x\in Z$

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

15. Solve the inequation $(-7x-56)\geq 0, x\in Z$

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

16. Which of the following inequations is the same as $(7x+9)\geq(-3x+1), x\in Z$

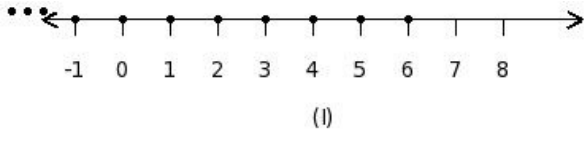
(i) $6>(-3x+1), x\in Z$ (ii) $6\geq(-10x-2), x\in Z$ (iii) $6<(-3x+1), x\in Z$ (iv) $(7x+9)<(-10x-2), x\in Z$

(v) $(7x+9)>(-10x-2), x\in Z$

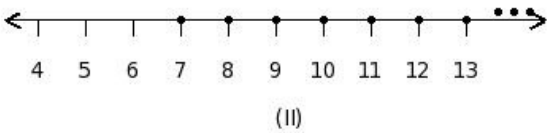
17. Solve the inequation $5x>0, x\in Z$

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

18. Identify the solution for the inequality $(2x-14)\leq 0, x\in Z$



(I)



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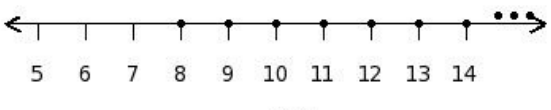

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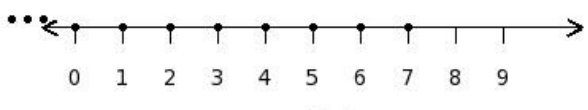
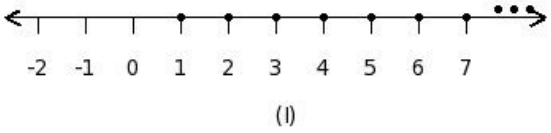


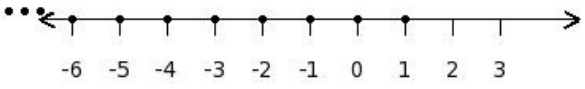
(IV)

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

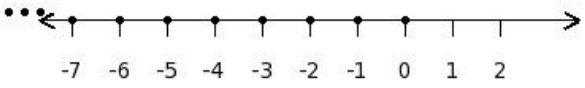
19. Which of the following figures represents the solution set
{2,3,4,5,6,7,...}



(I)



(II)



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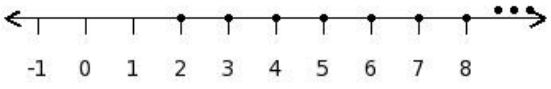


(IV)

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

20. Find the solution set for the given inequation
$(3x+27)<0$, where the replacement set is {-7,-8,-9,-10,-11,-12,-13}

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

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

21. Find the solution set of $(-6)\leq 2x<2, x\in Z$

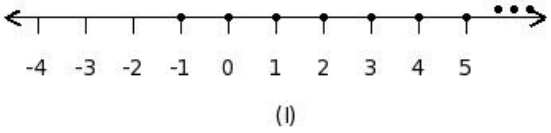
(i) {-3,-2,-1,0} (ii) {-5,-4,-3,-2} (iii) {-1,0,1,2} (iv) {-2,-1,0,1} (v) {-4,-3,-2,-1}

22. Which of the following inequations is not the same as
$(-6x-7)>(-2x-2), x\in Z$

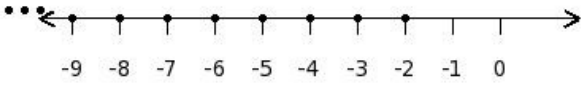
(i) $(-5x-1)>(-x+4), x\in Z$ (ii) $(-7x-15)>(-3x-10), x\in Z$ (iii) $(-8x-7)>(-4x-2), x\in Z$

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

23. Identify the solution for the inequality $(2x+4)\geq 0, x\in Z$



(I)



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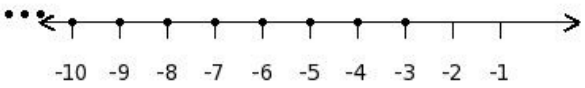

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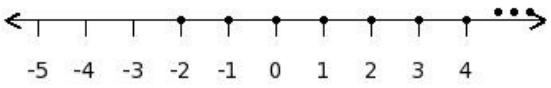

(IV)

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

24. Which of the following inequations is the same as $(-2x-9)>(9x+8), x\in Z$

(i) $(7x-16)>(18x+1), x\in Z$ (ii) $(-2x-9)<(18x+1), x\in Z$ (iii) $(7x-16)>(9x+8), x\in Z$

(iv) $(-2x-9)>(18x+1), x\in Z$ (v) $(7x-16)<(9x+8), x\in Z$

25. The simplified form of the inequality $(-9x-6)>(-5x+4), x\in Z$ is

(i) $x\geq(-\frac{11}{4}), x\in Z$ (ii) $x>(-\frac{9}{4}), x\in Z$ (iii) $x<(-\frac{5}{2}), x\in Z$ (iv) $x<(-\frac{9}{4}), x\in Z$ (v) $x\leq(-\frac{11}{4}), x\in Z$

Assignment Key

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

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