

EduSahara™ Learning Center Assignment

Grade : Class VII, ICSE
Chapter : Linear Inequations
Name : Linear Inequations Equivalence
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1. Which of the following is an inequation?

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

2. Which of the following is not an inequation?

- (i) $(7x + 2) \leq 3, x \in \mathbb{Z}$
(ii) $(7x - 6) < (-3), x \in \mathbb{Z}$
(iii) $(4x - 8) > 4, x \in \mathbb{Z}$
(iv) $(-3x - 6) \geq (-7), x \in \mathbb{Z}$
(v) $(6x + 2) = (-9)$
-

3. Which of the following is not an inequation?

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

Which of the following inequations is the same as

4. $(8x - 8) < 9x, x \in \mathbb{Z}$
(i) $(8x - 8) > (13x + 3), x \in \mathbb{Z}$
(ii) $(12x - 5) > 9x, x \in \mathbb{Z}$
(iii) $(8x - 8) < (13x + 3), x \in \mathbb{Z}$
(iv) $(12x - 5) < (13x + 3), x \in \mathbb{Z}$

$$(v) \quad (12x - 5) < 9x, x \in \mathbb{Z}$$

Which of the following inequations is the same as

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

Which of the following inequations is the same as

6. $(x + 8) \leq (7x - 6), x \in \mathbb{Z}$
- (i) $(x + 8) < (8x + 3), x \in \mathbb{Z}$
- (ii) $(x + 8) > (8x + 3), x \in \mathbb{Z}$
- (iii) $(2x + 17) > (7x - 6), x \in \mathbb{Z}$
- (iv) $(2x + 17) < (7x - 6), x \in \mathbb{Z}$
- (v) $(2x + 17) \leq (8x + 3), x \in \mathbb{Z}$
-

Which of the following inequations is the same as

7. $(6x - 1) \leq (-5x + 7), x \in \mathbb{Z}$
- (i) $(6x - 1) < (-x + 1), x \in \mathbb{Z}$
- (ii) $(6x - 1) > (-x + 1), x \in \mathbb{Z}$
- (iii) $(10x - 7) \leq (-x + 1), x \in \mathbb{Z}$
- (iv) $(10x - 7) > (-5x + 7), x \in \mathbb{Z}$
- (v) $(10x - 7) < (-5x + 7), x \in \mathbb{Z}$
-

8. Which of the following inequations is the same as

$$(-9x + 5) > (6x + 8), x \in \mathbb{Z}$$

(i) $(-3x + 10) > (6x + 8), x \in \mathbb{Z}$

(ii) $(-3x + 10) < (6x + 8), x \in \mathbb{Z}$

(iii) $(-3x + 10) > (12x + 13), x \in \mathbb{Z}$

(iv) $(-9x + 5) > (12x + 13), x \in \mathbb{Z}$

(v) $(-9x + 5) < (12x + 13), x \in \mathbb{Z}$

Which of the following inequations is the same as

9. $(-5x - 2) > (-x + 5), x \in \mathbb{Z}$

(i) $(-5x - 2) < (-4x + 13), x \in \mathbb{Z}$

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

(iii) $(-8x + 6) > (-4x + 13), x \in \mathbb{Z}$

(iv) $(-8x + 6) > (-x + 5), x \in \mathbb{Z}$

(v) $(-5x - 2) > (-4x + 13), x \in \mathbb{Z}$

Which of the following inequations is the same as

10. $(-4x + 7) \geq (5x + 4), x \in \mathbb{Z}$

(i) $(-4x + 7) < (8x + 3), x \in \mathbb{Z}$

(ii) $(-4x + 7) > (8x + 3), x \in \mathbb{Z}$

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

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

(v) $(-x + 6) \geq (8x + 3), x \in \mathbb{Z}$

Which of the following inequations is the same as

11. $(4x - 9) \geq (-x - 2), x \in \mathbb{Z}$

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

$$(ii) \quad (4x - 9) < (-2), x \in \mathbb{Z}$$

$$(iii) \quad (5x - 9) < (-x - 2), x \in \mathbb{Z}$$

$$(iv) \quad (5x - 9) > (-x - 2), x \in \mathbb{Z}$$

$$(v) \quad (5x - 9) \geq (-2), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$12. \quad (4x - 3) < (-7x + 6), x \in \mathbb{Z}$$

$$(i) \quad (4x - 3) < (35x - 30), x \in \mathbb{Z}$$

$$(ii) \quad (-20x + 15) < (-7x + 6), x \in \mathbb{Z}$$

$$(iii) \quad (-20x + 15) > (-7x + 6), x \in \mathbb{Z}$$

$$(iv) \quad (-20x + 15) > (35x - 30), x \in \mathbb{Z}$$

$$(v) \quad (4x - 3) > (35x - 30), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$13. \quad (3x + 4) \leq (9x - 1), x \in \mathbb{Z}$$

$$(i) \quad (-15x - 20) < (9x - 1), x \in \mathbb{Z}$$

$$(ii) \quad (-15x - 20) > (9x - 1), x \in \mathbb{Z}$$

$$(iii) \quad (3x + 4) > (-45x + 5), x \in \mathbb{Z}$$

$$(iv) \quad (-15x - 20) \geq (-45x + 5), x \in \mathbb{Z}$$

$$(v) \quad (3x + 4) < (-45x + 5), x \in \mathbb{Z}$$

Which of the following inequations is the same as

$$14. \quad (-6x + 4) > (-9x - 1), x \in \mathbb{Z}$$

$$(i) \quad (-18x + 12) < (-9x - 1), x \in \mathbb{Z}$$

$$(ii) \quad (-6x + 4) < (-27x - 3), x \in \mathbb{Z}$$

$$(iii) \quad (-18x + 12) > (-9x - 1), x \in \mathbb{Z}$$

$$(iv) \quad (-6x + 4) > (-27x - 3), x \in \mathbb{Z}$$

$$(v) \quad (-18x + 12) > (-27x - 3), x \in \mathbb{Z}$$

Which of the following inequations is the same as

15. $(x - 1) \geq (-6x - 7), x \in \mathbb{Z}$

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

(ii) $(x - 1) < (24x + 28), x \in \mathbb{Z}$

(iii) $(-4x + 4) \leq (24x + 28), x \in \mathbb{Z}$

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

(v) $(x - 1) > (24x + 28), x \in \mathbb{Z}$

Which of the following inequations is not the same as

16. $(-6x - 4) < (5x - 3), x \in \mathbb{Z}$

(i) $(-13x + 2) < (-2x + 3), x \in \mathbb{Z}$

(ii) $(-13x + 2) < (11x + 1), x \in \mathbb{Z}$

(iii) $0 < (11x + 1), x \in \mathbb{Z}$

(iv) $(-15x - 12) < (-4x - 11), x \in \mathbb{Z}$

(v) $(-7x - 1) < 4x, x \in \mathbb{Z}$

Which of the following inequations is not the same as

17. $(-6x - 3) < (8x - 9), x \in \mathbb{Z}$

(i) $(-7x - 10) < (12x - 7), x \in \mathbb{Z}$

(ii) $(-7x - 10) < (7x - 16), x \in \mathbb{Z}$

(iii) $(-15x - 4) < (-x - 10), x \in \mathbb{Z}$

(iv) $(-x - 2) < (13x - 8), x \in \mathbb{Z}$

(v) $(-2x - 1) < (12x - 7), x \in \mathbb{Z}$

Which of the following inequations is not the same as

18. $(-8x + 9) \leq (-5x - 7), x \in \mathbb{Z}$
- (i) $(-14x + 10) \leq (-11x - 6), x \in \mathbb{Z}$
- (ii) $(-3x + 4) \leq (-9x - 5), x \in \mathbb{Z}$
- (iii) $(-12x + 11) \leq (-9x - 5), x \in \mathbb{Z}$
- (iv) $(-3x + 4) \leq (-12), x \in \mathbb{Z}$
- (v) $(-15x + 9) \leq (-12x - 7), x \in \mathbb{Z}$
-

Which of the following inequations is not the same as

19. $(-3x + 7) \leq (3x - 1), x \in \mathbb{Z}$
- (i) $(-11x + 11) \leq (-5x + 3), x \in \mathbb{Z}$
- (ii) $(2x + 7) \leq (-5x + 3), x \in \mathbb{Z}$
- (iii) $(-11x + 9) \leq (-5x + 1), x \in \mathbb{Z}$
- (iv) $(2x + 7) \leq (8x - 1), x \in \mathbb{Z}$
- (v) $(-8x + 8) \leq (-2x), x \in \mathbb{Z}$
-

Which of the following inequations is not the same as

20. $(-3x + 1) > (-x + 9), x \in \mathbb{Z}$
- (i) $(-4) > (2x + 4), x \in \mathbb{Z}$
- (ii) $(-x - 8) > x, x \in \mathbb{Z}$
- (iii) $(-10x + 7) > (-8x + 15), x \in \mathbb{Z}$
- (iv) $(-11x + 10) > (-9x + 18), x \in \mathbb{Z}$
- (v) $(-10x + 7) > (2x + 4), x \in \mathbb{Z}$
-

Which of the following inequations is not the same as

21. $(-5x + 7) > (-9x), x \in \mathbb{Z}$

(i) $(x + 16) > (-3x + 9), x \in \mathbb{Z}$

(ii) $(-8x - 2) > (-12x - 9), x \in \mathbb{Z}$

(iii) $(3x + 8) > (-6x + 1), x \in \mathbb{Z}$

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

(v) $(-2x + 8) > (-6x + 1), x \in \mathbb{Z}$

Which of the following inequations is not the same as

22. $(x - 4) \geq (-7x + 5), x \in \mathbb{Z}$

(i) $(3x - 8) \geq (-5x + 1), x \in \mathbb{Z}$

(ii) $(-5) \geq (-8x + 4), x \in \mathbb{Z}$

(iii) $(3x - 8) \geq (-x + 14), x \in \mathbb{Z}$

(iv) $(7x + 5) \geq (-x + 14), x \in \mathbb{Z}$

(v) $(4x - 4) \geq (-4x + 5), x \in \mathbb{Z}$

Which of the following inequations is not the same as

23. $(3x + 3) \geq x, x \in \mathbb{Z}$

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

(ii) $(x + 12) \geq (-x + 9), x \in \mathbb{Z}$

(iii) $(5x + 11) \geq (3x + 8), x \in \mathbb{Z}$

(iv) $(-6x - 2) \geq (-x + 9), x \in \mathbb{Z}$

(v) $(-6x - 2) \geq (-8x - 5), x \in \mathbb{Z}$

24. Which of the following statements are true?

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

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

Which of the following inequations is not the same as

25. $(4x - 1) < (2x + 3), x \in \mathbb{Z}$

(i) $(-36x + 9) > (-18x - 27), x \in \mathbb{Z}$

(ii) $(12x - 3) < (-6x - 9), x \in \mathbb{Z}$

(iii) $(-12x + 3) > (-6x - 9), x \in \mathbb{Z}$

(iv) $(24x - 6) < (12x + 18), x \in \mathbb{Z}$

(v) $(12x - 3) < (6x + 9), x \in \mathbb{Z}$

Which of the following inequations is not the same as

26. $(-7x + 6) \leq (-6x - 8), x \in \mathbb{Z}$

(i) $(21x - 18) \geq (18x + 24), x \in \mathbb{Z}$

(ii) $(-28x + 24) \leq (12x + 16), x \in \mathbb{Z}$

(iii) $(-35x + 30) \leq (-30x - 40), x \in \mathbb{Z}$

(iv) $(-28x + 24) \leq (-24x - 32), x \in \mathbb{Z}$

(v) $(14x - 12) \geq (12x + 16), x \in \mathbb{Z}$

Which of the following inequations is not the same as

27. $(-2x) > (-6x + 7), x \in \mathbb{Z}$

(i) $18x < (54x - 63), x \in \mathbb{Z}$

(ii) $(-6x) > (-18x + 21), x \in \mathbb{Z}$

(iii) $(-10x) > (42x - 49), x \in \mathbb{Z}$

(iv) $(-10x) > (-30x + 35), x \in \mathbb{Z}$

(v) $14x < (42x - 49), x \in \mathbb{Z}$

Which of the following inequations is not the same as

28.

$$(4x + 9) \geq (-x + 4), x \in \mathbb{Z}$$

$$(i) (36x + 81) \geq (-9x + 36), x \in \mathbb{Z}$$

$$(ii) (-4x - 9) \leq (x - 4), x \in \mathbb{Z}$$

$$(iii) (8x + 18) \geq (-2x + 8), x \in \mathbb{Z}$$

$$(iv) (24x + 54) \geq (-9x + 36), x \in \mathbb{Z}$$

$$(v) (24x + 54) \geq (-6x + 24), x \in \mathbb{Z}$$

Assignment Key

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