



1. Which of the following is an inequation?

- (i) 8 (ii) $(7x+5) < 0, x \in \mathbb{Z}$ (iii) $(3x+8)$ (iv) $(3x+7) = 0$

2. Which of the following is not an inequation?

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

3. Which of the following is not an inequation?

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

4. Which of the following inequations is the same as

$(-9x-7) < (-6x+2), x \in \mathbb{Z}$

- (i) $(-10x-16) > (-6x+2), x \in \mathbb{Z}$ (ii) $(-10x-16) < (-6x+2), x \in \mathbb{Z}$ (iii) $(-9x-7) > (-7x-7), x \in \mathbb{Z}$
(iv) $(-10x-16) < (-7x-7), x \in \mathbb{Z}$ (v) $(-9x-7) < (-7x-7), x \in \mathbb{Z}$

5. Which of the following inequations is the same as

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

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

6. Which of the following inequations is the same as

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

- (i) $(-6x-9) < (-6x+3), x \in \mathbb{Z}$ (ii) $(-10x-8) \leq (-6x+3), x \in \mathbb{Z}$ (iii) $(-10x-8) < (-2x+2), x \in \mathbb{Z}$
(iv) $(-10x-8) > (-2x+2), x \in \mathbb{Z}$ (v) $(-6x-9) > (-6x+3), x \in \mathbb{Z}$

7. Which of the following inequations is the same as

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

- (i) $(16x+13) > (2x+9), x \in \mathbb{Z}$ (ii) $(9x+8) > (9x+14), x \in \mathbb{Z}$ (iii) $(16x+13) < (2x+9), x \in \mathbb{Z}$
(iv) $(16x+13) \leq (9x+14), x \in \mathbb{Z}$ (v) $(9x+8) < (9x+14), x \in \mathbb{Z}$

8. Which of the following inequations is the same as

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

- (i) $(12x-12) < (4x+4), x \in \mathbb{Z}$ (ii) $(12x-12) > (4x+4), x \in \mathbb{Z}$ (iii) $(12x-12) > (8x-4), x \in \mathbb{Z}$
(iv) $(8x-4) < (8x-4), x \in \mathbb{Z}$ (v) $(8x-4) > (8x-4), x \in \mathbb{Z}$

9. Which of the following inequations is the same as

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

(i) $(8x+5) > (-6x+5), x \in \mathbb{Z}$ (ii) $(x+4) > (x+6), x \in \mathbb{Z}$ (iii) $(8x+5) > (x+6), x \in \mathbb{Z}$

(iv) $(8x+5) < (-6x+5), x \in \mathbb{Z}$ (v) $(x+4) < (x+6), x \in \mathbb{Z}$

10. Which of the following inequations is the same as

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

(i) $(-5x+4) < (-6x-4), x \in \mathbb{Z}$ (ii) $(-5x+4) > (-6x-4), x \in \mathbb{Z}$ (iii) $(2x+2) > (-13x-2), x \in \mathbb{Z}$

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

11. Which of the following inequations is the same as

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

(i) $(-7x-4) \geq (-9x+7), x \in \mathbb{Z}$ (ii) $(x-3) > (-9x+7), x \in \mathbb{Z}$ (iii) $(x-3) < (-9x+7), x \in \mathbb{Z}$

(iv) $(-7x-4) < (-x+8), x \in \mathbb{Z}$ (v) $(-7x-4) > (-x+8), x \in \mathbb{Z}$

12. Which of the following inequations is the same as

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

(i) $(-12x) > (8x+1), x \in \mathbb{Z}$ (ii) $(-12x) > (-24x-3), x \in \mathbb{Z}$ (iii) $4x > (-24x-3), x \in \mathbb{Z}$

(iv) $4x < (-24x-3), x \in \mathbb{Z}$ (v) $(-12x) < (8x+1), x \in \mathbb{Z}$

13. Which of the following inequations is the same as

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

(i) $(-x+4) < (27x+81), x \in \mathbb{Z}$ (ii) $(-x+4) > (27x+81), x \in \mathbb{Z}$ (iii) $(-9x+36) < (3x+9), x \in \mathbb{Z}$

(iv) $(-9x+36) > (3x+9), x \in \mathbb{Z}$ (v) $(-9x+36) \leq (27x+81), x \in \mathbb{Z}$

14. Which of the following inequations is the same as

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

(i) $(2x-2) < (-40x-25), x \in \mathbb{Z}$ (ii) $(-10x+10) < (8x+5), x \in \mathbb{Z}$ (iii) $(-10x+10) < (-40x-25), x \in \mathbb{Z}$

(iv) $(2x-2) > (-40x-25), x \in \mathbb{Z}$ (v) $(-10x+10) > (8x+5), x \in \mathbb{Z}$

15. Which of the following inequations is the same as

$$(7x-8) \geq (x-1), x \in \mathbb{Z}$$

(i) $(63x-72) \geq (9x-9), x \in \mathbb{Z}$ (ii) $(7x-8) < (9x-9), x \in \mathbb{Z}$ (iii) $(63x-72) < (x-1), x \in \mathbb{Z}$

(iv) $(7x-8) > (9x-9), x \in \mathbb{Z}$ (v) $(63x-72) > (x-1), x \in \mathbb{Z}$

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

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

(i) $(-3x+6) < (-9x+1), x \in \mathbb{Z}$ (ii) $(-3x+5) < (-9x), x \in \mathbb{Z}$ (iii) $(3x+5) < (-3x), x \in \mathbb{Z}$

(iv) $(-6x+11) < (-12x+6), x \in \mathbb{Z}$ (v) $(-3x+5) < (-9x+1), x \in \mathbb{Z}$

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

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

(i) $(-x-1) < (-17x), x \in \mathbb{Z}$ (ii) $(x-5) < (-15x-7), x \in \mathbb{Z}$ (iii) $1 < (-16x+2), x \in \mathbb{Z}$

(iv) $(x-5) < (-15x-4), x \in \mathbb{Z}$ (v) $(x-8) < (-15x-7), x \in \mathbb{Z}$

18. Which of the following inequations is not the same as $(-7x-3) \leq (-5x-6), x \in \mathbb{Z}$
- (i) $(-x) \leq (-x-3), x \in \mathbb{Z}$ (ii) $(x+2) \leq (3x-1), x \in \mathbb{Z}$ (iii) $(-x) \leq (x-3), x \in \mathbb{Z}$ (iv) $(-3x) \leq (-x-3), x \in \mathbb{Z}$
- (v) $(-15x) \leq (-13x-3), x \in \mathbb{Z}$

19. Which of the following inequations is not the same as $(-6x) \leq (7x+9), x \in \mathbb{Z}$
- (i) $(-11x+4) \leq (2x+13), x \in \mathbb{Z}$ (ii) $(3x+4) \leq (16x+13), x \in \mathbb{Z}$ (iii) $(-12x) \leq (x+9), x \in \mathbb{Z}$
- (iv) $(-3) \leq (13x+6), x \in \mathbb{Z}$ (v) $(-3) \leq (x+9), x \in \mathbb{Z}$

20. Which of the following inequations is not the same as $(7x-2) > (-7x+1), x \in \mathbb{Z}$
- (i) $(6x+2) > (-4x-2), x \in \mathbb{Z}$ (ii) $(6x+2) > (-8x+5), x \in \mathbb{Z}$ (iii) $(10x-5) > (-4x-2), x \in \mathbb{Z}$
- (iv) $(6x-8) > (-8x-5), x \in \mathbb{Z}$ (v) $(4x-3) > (-10x), x \in \mathbb{Z}$

21. Which of the following inequations is not the same as $(x-6) > (4x-7), x \in \mathbb{Z}$
- (i) $(7x-4) > (10x-5), x \in \mathbb{Z}$ (ii) $(7x+3) > (10x+2), x \in \mathbb{Z}$ (iii) $(7x-1) > (10x-2), x \in \mathbb{Z}$
- (iv) $(7x+3) > (10x-2), x \in \mathbb{Z}$ (v) $(-6x-13) > (-3x-14), x \in \mathbb{Z}$

22. Which of the following inequations is not the same as $(-9x+5) \geq (-2x+3), x \in \mathbb{Z}$
- (i) $(-3x+4) \geq (4x+2), x \in \mathbb{Z}$ (ii) $(-13x) \geq (-6x-2), x \in \mathbb{Z}$ (iii) $(-7x+5) \geq 3, x \in \mathbb{Z}$
- (iv) $(-12x+5) \geq (-5x+3), x \in \mathbb{Z}$ (v) $(-12x+5) \geq (4x+2), x \in \mathbb{Z}$

23. Which of the following inequations is not the same as $(5x-6) \geq (6x+8), x \in \mathbb{Z}$
- (i) $(-3x-11) \geq (12x+2), x \in \mathbb{Z}$ (ii) $(11x-12) \geq (12x+2), x \in \mathbb{Z}$ (iii) $(-4x-13) \geq (-3x+1), x \in \mathbb{Z}$
- (iv) $(-3x-11) \geq (-2x+3), x \in \mathbb{Z}$ (v) $(-3x-10) \geq (-2x+4), x \in \mathbb{Z}$

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) Adding same number on both sides does not change the inequality
d) Subtracting same number on both sides does not change the inequality
e) Dividing same negative number on both sides does not change the inequality
f) Multiplying same negative number on both sides does not change the inequality

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

25. Which of the following inequations is not the same as $(3x-9) < (9x+3), x \in \mathbb{Z}$
- (i) $(3x-9) < (9x+3), x \in \mathbb{Z}$ (ii) $(-3x+9) > (-9x-3), x \in \mathbb{Z}$ (iii) $(21x-63) < (63x+21), x \in \mathbb{Z}$
- (iv) $(9x-27) < (27x+9), x \in \mathbb{Z}$ (v) $(3x-9) < (63x+21), x \in \mathbb{Z}$

26. Which of the following inequations is not the same as $(9x+5) \leq (4x-5), x \in \mathbb{Z}$
- (i) $(81x+45) \leq (36x-45), x \in \mathbb{Z}$ (ii) $(18x+10) \leq (8x-10), x \in \mathbb{Z}$ (iii) $(54x+30) \leq (-8x+10), x \in \mathbb{Z}$
- (iv) $(-18x-10) \geq (-8x+10), x \in \mathbb{Z}$ (v) $(54x+30) \leq (24x-30), x \in \mathbb{Z}$

27. Which of the following inequations is not the same as $(-5x+4) > (-9x-5), x \in \mathbb{Z}$
- (i) $(-30x+24) > (-54x-30), x \in \mathbb{Z}$ (ii) $(5x-4) < (9x+5), x \in \mathbb{Z}$ (iii) $(25x-20) < (45x+25), x \in \mathbb{Z}$
- (iv) $(20x-16) < (36x+20), x \in \mathbb{Z}$ (v) $(25x-20) > (-54x-30), x \in \mathbb{Z}$

28. Which of the following inequations is not the same as $(-2x+5) \geq (-6x-3), x \in \mathbb{Z}$
- (i) $(-2x+5) \geq (6x+3), x \in \mathbb{Z}$ (ii) $(2x-5) \leq (6x+3), x \in \mathbb{Z}$ (iii) $(8x-20) \leq (24x+12), x \in \mathbb{Z}$
- (iv) $(-2x+5) \geq (-6x-3), x \in \mathbb{Z}$ (v) $(14x-35) \leq (42x+21), x \in \mathbb{Z}$

Assignment Key

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