CHAPTER-6 LINEAR INEQUALITIES 01 MARK TYPE QUESTIONS

_	UT WARK TYPE QUESTIONS	T
Q. NO	QUESTION	MARK
1.	Ram has 6 more mangos than Rahim. If they have more than 100 mangoes. Image: State of the state	1
2.	In a garden there are two types of plants Rose & Jasmine with maximum 500 plants.	1
	The ratio of Rose and Jasmine plants are in the ratio 2 : 3. What is the maximum number of Rose plants?	
	(a) 200 (b) 300 (c) 350 (d) 400	
3.	A furniture dealer deals in only two items-tables and chairs. He has Rs60,000 to invest and has storage space of at most 100 pieces. A table costs Rs3000 and a chair Rs1000.	1
4.	A furniture dealer deals in only two items-tables and chairs. He has Rs 60,000 to invest and has storage space of at most 100 pieces. A table costs Rs 3000 and a chair Rs 1000. Let x be the number of tables and y be the number of chairs that the dealer buys. Which of the following represents the storage constraint/ inequality. (a) $x + y \le 100$ (b) $x + y < 100$ (c) $x + y > 100$ (d) $x + y \ge 100$	1
5.	A dietician wishes to mix two types of foods in such a way that vitamin contents of the mixture contain at least 8 units of vitamin A and 10 units of vitamin C. Food 'l' contains 2 units/kg of vitamin A and 1 unit/kg of vitamin C. Food 'll' contains 1 unit/kg of vitamin A and 2 units/kg of vitamin C. Let the mixture contain x kg of Food 'l' and y kg of Food 'll'. Which of the following is true? (a) $x \ge 0$, $y < 0$ (b) $x \ge 0$, $y \ge 0$ (c) $x > 0$, $y > 0$ (d) $x < 0$, $y < 0$	1

6.	A dietician wishes to mix two types of foods in such a way that vitamin contents of the mixture contain at least 8 units of vitamin A and 10 units of vitamin C. Food 'l' contains 2 units/kg of vitamin A and 1 unit/kg of vitamin C. Food 'll' contains 1 unit/kg of vitamin A and 2 units/kg of vitamin C. Let the mixture contain x kg of Food 'l' and y kg of Food 'll'. Which of the following is inequality can be represented for Vitamin A ? (a) $2x + y > 8$ (b) $2x + y < 8$ (c) $2x + y \ge 8$ (d) $2x + y \le 8$ The digits in the tens place of a two digit number is 3 more than the digit in the unit place.	1
	Forming 2 Digit Numbers Let the digit at unit place be b. If the number is less than 100 then (a) $11b + 30 < 100$ (b) $10b + 30 < 100$ (c) $11b + 3 < 100$ (d) $10b + 3 < 100$	
8.	An aeroplane can carry a maximum of 250 passengers. The airline reserves at least 30 seats for executive class. If x is the number of seats reserved for executive class then (a) $x \ge 30$ (b) $x > 30$ (c) $x = 30$ (d) $x \le 30$	1
9.	An aeroplane can carry a maximum of 300 passengers. The airline reserves at least 30 seats for executive class. However, at least 5 times as many passengers prefer to travel by economy class than by the executive class. If x passengers travel by executive class and y passengers by economic then which of the following is true? (a) $y = 5x$ (b) $y - 5x \ge 0$ (c) $y - 5x \le 0$ (d) $y - 5x > 0$	1
10.	A company manufactures two types of novelty souvenirs made of plywood. Souvenirs of type A require 5 minutes each for cutting and 10 minutes each for assembling. Souvenirs of type B require 8 minutes each for cutting and 8 minutes each for assembling. There are 3 hours 20 minutes available for cutting and 4 hours for assembling. Let the company manufactures x number of Souvenirs of type A and y number of Souvenirs of type B. Which of the following inequality is true for cutting? (a) $5x + 8y < 200$ (b) $5x + 8y \ge 200$	1
11.	The graph given in the figure is of a. $x < 1$ b. $x > 1$ c. $ x \le 1$ d. $ x \ge 1$	1
12.	The interval (-3,∞) is contained in the solution of ? a. x>-3	1

13. The shaded part of the number line is 4 a. $x > 5$ b. $x < 5$ c. $x \le 5$ d. $x \ge 5$ 14. Which of the following inequation represents the marks obtained by students in a test of maximum marks 40. a. $x > 40$ b. $x < 40$ c. $0 < x < 40$ d. $0 \le x \le 40$ 15. The solution set of $x^{1} + 1 < 0$ is a a. infinite set b. finite set b. null set d. real number set 16. Multiplying with -1 on both sides of the inequation $x < 5$ we obtain a. $-x < 5$ b. $-x > 5$ c. $-x \le 5$ d. $x > 5$ 17. Which of the following inequation doesn't represent the area of a shape. a. $x > 1$; $x \in Z$ b. $x < 4$; $x \in \mathbb{N}$ c. $x \le 2$; $x \in \mathbb{R}$ 18. A linear inequation in 1 variable divides number line into parts. a. 1 b. 2 c. 3 d. 4 19. The common solution of the given inequations is x - 10 < x < 2 b. $1 < x < 2$ c. $1 > x > 2$ d. $x > 0$ 20. 20. 20. 21. 21. 22. 23. 24. 23. 24. 24. 25. 24. 25. 26. 27. 20. 20. 20. 20. 20. 20. 20. 20		b. x≤-3	
d. x>013.13.The shaded part of the number line is $\frac{1}{3}$ a. x>5b. x<5 c. x ≤ 5			
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Range of which of the following functions are represented by above inequalities. a. Cosec θ b. Sin θ c. Cos θ d. Tan θ 21. 1		$\checkmark + \bigcirc + + + + + + + + \bigcirc + \triangleright$	
a. $Cosec \theta$ b. $Sin \theta$ c. $Cos \theta$ d. $Tan \theta$ 21. $\uparrow \gamma$ 1		-5 -4 -3 -2 -1 0 1 2 3 4 5	
21. [†] Y 1		Range of which of the following functions are represented by above inequalities.	
		a. Cosec θ b. Sin θ c. Cos θ d. Tan θ	
y=2	21.	TY	1
		A y=2 B	
		- Y '	

	The inequality represented in the graph is given by	
	(a) $y \le 2$ (b) $y = 2$ (c) $y > 2$ (d) $y < 2$	
22.	A furniture dealer deals in two items ,tables and chairs.He has ₹ 30,000 to invest and a space to store atmost 60 pieces.A table cost him ₹ 1500 and a chair ₹ 300.The data Formulated in the form of an inequation will be	1
	(a) $1500x + 300y > 30000; x + y < 60, x \ge 0, y \ge 0$	
	(b) $1500x + 300y \ge 30000; x + y \ge 60, x \ge 0, y \ge 0$	
	(c) $1500x + 300y \le 30000; x + y \ge 60, x \ge 0, y \ge 0$	
	(d) $1500x + 300y \le 30000; x + y \le 60, x \ge 0, y \ge 0$	
23.	If $-x - 8 \le 3$ then the value of x is	1
24.	(a) $x \le 11$ (b) $x \le -11$ (c) $x \ge -11$ (d) $x \ge 11$ Length	1
	Midth	
	The length of a rectangle is three times the breadth. If the minimum perimeter of the rectangle is 160 cm, then (a) breadth > 20 cm (b) length < 20 cm (c) breadth $x \ge 20$ cm	
25.	(d) length $\leq 20 \text{ cm}$ Solution set for inequality $\frac{1}{r-2} < 0$ is	1
26.	(a) $(2,\infty)$ (b) ϕ (c) $(0,2)$ (d) $(-\infty,2)$ If $\frac{(x-3)}{(x-2)} > 0$ then x belongs to	1
	(x-2) of their x belongs to	
	(a) $(-\infty, 2) \cup [3, \infty)$ (b) $(-\infty, 2] \cup [3, \infty)$ (c) $(2,3)$ (d) $(-\infty, 2) \cup (3, \infty)$	
27.	Solutions of the inequalities comprising a system in variable x are represented on number lines as given below the Fig	1
	$\longleftrightarrow \longleftrightarrow \longleftrightarrow \longleftrightarrow $	
	-4 3 -3 I Fig 6.2	
	(A) $x \in (-\infty, -4] \cup [3, \infty)$ (B) $x \in [-3, 1]$	
	(C) $x \in (-\infty, -4) \cup [3, \infty)$ (D) $x \in [-4, 3]$	
28.	Assertion (A): The minimum value of $4^x + 4^{1-x}$ is 4 where $x \in R$ Reason (R): A.M $\geq G.M$ (1) Both A and R are true and R is the correct explanation of A. (2) Both A and R are true but R is not the correct explanation of A. (3) A is true but R is false.	1
	(4) A is false but R is true. Which one is correct	

<i>1</i> u	1 (b) 2 (c) 3 (d) 4 In drilling world's deepest hole it was found that the temperature T in degree celcius, x km below	1
29.	the earth's surface was given by T = $30 + 25 (x - 3)$, $3 \le x \le 15$. At what depth will the temperature be	1
	between 155°C and 205°C?	
	$(a) 8 < x < 10$ (b) $8 \le x \le 10$	
20		-
30.	Assertion (A): The minimum value of $2^{sin^2x} + 2^{cos^2}x$ is $\sqrt{2}$ where $x \in \mathbb{R}$	1
	Reason (R): $A.M \ge G.M$	
	(1) Both A and R are true and R is the correct explanation of A.	
	(2) Both A and R are true but R is not the correct explanation of A.	
	(3) A is true but R is false.	
	(4) A is false but R is true.	
	Which one is correct	
31.	1 (b) 2 (c) 3 (d) 4	1
	A business man has bought 100 mabiles by 0000 each and want to sell even one by 11000	
	A business man has bought 100 mobiles by 9000 each and want to sell every one by 11000	
	and At least how many mahiles must be call to realize some profit?	
	each. At least how many mobiles must he sell to realize some profit?	
	(a) 80(b) 81(c) 82(d) 83	
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1
32.	(a) 80(b) 81(c) 82(d) 83 Sunil is well known about Celsius but not about Fahrenheit. He has bought a thermometer which shown temperature in Fahrenheit.	1

	C = F - 32	
	and 215.6°F. Find the range of his body temperature inCelsius? Where $\frac{c}{5} = \frac{F-32}{9}$	
	(a) $95 \le C \le 98$ (b) $100 \le C \le 102$	
	© $97 \le C \le 110 \text{ (d)} 100 \le C \le 104$	
33.	If $\frac{1}{a} < \frac{1}{b}$ then which of the following is correct? Where $a, b \in \mathbf{R} - \{0\}$	1
	(a) $a < b(b) b < a(c) a = b(d)$ none of these	
34.	Amal, Kamal and Bimal go to the school by walking from hostel where they are staying.	1
35.	Speed of Kamal is twice of Amal and speed of Bimal is seven less than thrice of Amal but not more than to Kamal. Find the maximum speed of Bimal. (a) 14 unit (b) 7 unit (c) 10 unit (d) 7/5 unit Solve $\frac{1}{2-x} \le -0.2$, $x \ne 2$, when x is whole number. (a) {3,4,5,6,7}(b){2,3,4,5,6,7}(c){7,8,9,10,}	1
	(d) none of these	
36.	A shopkeeper has 40 articles. By mistake he has sold 5 articles for 15% loss.	1
	Find the minimumprofit percentage for the remaining articles has to be sold to make profit at least 20%.	

37.	A student randomly takes some number and add with its reciprocal. In each case he gets more than two. The student thought it is always true for any nonzero real number. Is he correct? If not, find the range of real numbers where it is correct. (a) $(0,\infty)$ (b) $(0,1)$ (c) $(0,1)U(1,\infty)$ (d) none of these	1
38.	A man has gone outside without mobile and wanted to give some important information to his family, that's why he has gone to a public telephone booth.	1
39.	(a) 8 mins (b) 9 mins (c) 10 mins (d) 6 mins If $\frac{1}{x} < 0.5$ then find solution set of x, where x is a real number.	1
	(a) $(2,\infty)$ (b) $(-\infty,0)U(2,\infty)$ (c) $(-\infty,\frac{1}{2})$ (d) $(0,0.5)$	
40.	A club wants to do swimming competition among 20 members. Sofor this, collect 100 rupees from each for price money. By a meeting they have decided price will be given to first three positions and not exceed by total money collected.	1

	Price money for second position is twice third position and for first position is Rs150 less three times of third position. Find the price money for third position. (a) Rs 300 (b) Rs 413 (c) Rs 358 (d) Rs 314	
41.	$2 + 3x \le 5 + 3x \text{ is a}$ (i) Equality (ii) Equation (iii) Inequality (iv) Inequation	1
42.	The interval form of x \leq -4 is (a)(- ∞ , -4) (b) (- ∞ , -4] (c)(-4, ∞] (d) x \in [-4, ∞)	1
43.	If a>b and b>c then a>c Which property is it i)commutative ii) Identity iii) Associative iv)Distributive	1
44.	 In the following questions, a statement of Assertion(A)is followed by a statement of Reason (R). Choose the correct answer out of the following choices. (a) Both (A) and (R) are true and (R) is the correct explanation of (A). (b) Both (A) and (R) are true but (R) is not the correct explanation of (A). (c) (A) is true but (R) is false. (d)(A) is false but(R) is true. Assertion (A): The solution set of the inequality x-3<2 ,x ∈N is {1,2,3,4,5,6,7,8}. Reason (R) :Solution set of a inequality in x is set of values of x satisfying the inequality . Answer .1.A 2.B. 3. A 4. B 5. d 	1
45.	.1.A 2.B. 3. A 4. B 5. d	1

	Our Manufacturing Capability	
	A recharger manufacturing company produces rechargers and its cost function for a week is C(x) = $110(4270 + 23x)$ and its revenue function is R(x) = 3x, where x is the number of rechargers produced and sold per week. Number of rechargers must be sold for the company to realize a profit is A. $x \ge 618$ B. $x > 610$ C. $x > 480$ D.None of These	
46.		1
	$ 0 \qquad 3 $	
	Shaded part of a line is in given figure can also be described as A. $(-\infty, 0) \cup (3, \infty)$ B. $(-\infty, 0] \cup [3, \infty]$ C. $(0,3)$ D. $[0,3]$	
47.	If $ab < 0$ then find the relation	1
	i) $a < 0, b < 0$ <i>ii</i>) $a > 0, b > 0$	
	iii)a = 0, b > 0	
	iv)a > 0, b < 0	
48.	Find the solution set of $x + \sqrt{-1} < 0$	1
49.	In the following questions ,a statement of Assertion(A) is followed by a statement of Reason(R). Choose the correct answer out of the following choices. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).	1
	(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).	
	(c) (A) is true but(R) is false.	
	(d) (A) is false but(R) is true.	
	Assertion(A) : For x \in R, x<-3 then -5x >15 Reason (R): when both sides are multiplied (or divided) by the same negative number then	

	the sign of inequality reverse.	
50.	If $x + 5 > 4x - 10$, then find the range of x	1
51.	The length of a rectangle is three times the breadth. If the minimum perimeter of the rectangle is 160 cm, then	1
	(a) breadth > 20 cm (b) length < 20 cm	
	(c) breadth $\ge 20 \text{ cm}$ (d) length $\le 20 \text{ cm}$	
52.	If $-3x + 17 < -13$, then	1
	(a) $x \in (10, \infty)$ (b) $x \in [10, \infty)$	
	(c) $x \in (-\infty, 10]$ (d) $x \in [-10, 10)$	
53.	Given that x, y and b are real numbers and $x < y$, $b < 0$, then	1
	a) $x/b < y/b$ (b) $x/b \le y/b$	
	(c) $x/b > y/b$ (d) $x/b \ge y/b$	
54.	If $ x - 1 > 5$, then	1
	(a) $x \in (-4, 6)$ (b) $x \in [-4, 6]$	
	(c) $x \in (-\infty, -4) \cup (6, \infty)$ (d) $x \in [-\infty, -4) \cup [6, \infty)$ If $ x - 7 /(x - 7) \ge 0$, then	
55.		1
	(a) $x \in [7, \infty)$ (b) $x \in (7, \infty)$	
	(c) $x \in (-\infty, 7)$ (d) $x \in (-\infty, 7]$	
56.	If $4x + 3 < 6x + 7$, then x belongs	1
	(a) $(2, \infty)$ (b) $(-2, \infty)$	
	(c) $(-\infty, 2)$ (d) $(-4, \infty)$	
57.	Solving $-8 \le 5x - 3 < 7$, we get	1
	(a) $-1/2 \le x \le 2$ (b) $1 \le x \le 2$	
	(c) $-1 \le x \le 2$ (d) $-1 \le x \le 2$ 7>5 is	1
58.		
	a) linear inequality	
	b) quadratic inequality	

	c) numerical inequality	
	d) literal inequality	
59.	x>5 is	1
	a) double inequality	
	b) quadratic inequality	
	c) numerical inequality	
60.	d) literal inequality ax2+bx+c > 0 is	1
	a) double inequality	
	b) quadratic inequality	
	c) numerical inequality	
	d) linear inequality	
61.	If $-2 < 2x - 1 < 2$ then the value of <i>x</i> lies in the interval	1
	a) $(\frac{1}{2}, \frac{3}{2})$	
	b) $\left(-\frac{1}{2},\frac{3}{2}\right)$	
	c) $\left(\frac{3}{2}, \frac{1}{2}\right)$ d) $\left(\frac{3}{2}, -\frac{1}{2}\right)$	
	d) $(\frac{3}{2}, -\frac{1}{2})$	
62.	If $x^2 < -4$ then the value of x is	1
	If $x < -4$ then the value of x is	
	a) (-2,2)	
	b) (2,∞)	
	c) (−2,∞)	
	d) No solution	
63.	If $ x < -5$ then the value of x lies in the interval	1
	a) $(-\infty, -5)$	
	b) (∞,5)	
L		I

	c) (−5,∞)	
	d) No solution	
	e)	
64.	The solution of the $15 < \frac{3(x-2)}{5} < 0$ is	1
	a) $27 < x < 2$	
	b) $27 < x < -2$	
	c) $-27 < x < 2$	
	d) $-27 < x < -2$	
65.	If $\frac{x+3}{x-2} > \frac{1}{2}$ then x lies in the interval	1
	a) $\begin{pmatrix} x-2 & 2 \\ -8, \infty \end{pmatrix}$	
	b) $(8,\infty)$	
	c) (∞, −8)	
	d) (∞,8)	
66.	The solution of the inequality $3(2 - x) \ge 2(1 - x)$ for real x is	1
	a) $x < 4$	
	b) $x > 4$	
	c) $x \le 4$	
67.	d) $x \ge 4$ Find the solution for the pair of solution $x > 1$ and $x > -1$ is	1
07.	a) No solution	1
	b) $-1 < x < 1$	
	c) $x < -1$	
	$\frac{d}{x > 1}$	
68.	If $4x + 3 < 6x + 7$ then $x \in [2, \infty)$	1
	a) $(2,\infty)$ b) $(-2,\infty)$	
	c) $(-\infty, 2)$	
	d) $(-\infty,\infty)$	
69.	d) $(-\infty, \infty)$ Solution of $\frac{2x-3}{3x-5} \ge 3$ is	1
	a) $(1, \frac{12}{7})^{3x-5}$	
	b) $\left(\frac{5}{3}, \frac{12}{7}\right)$	
	c) $\left(-\infty, \frac{5}{3}\right)$	
	d) $(\frac{2}{7}, \infty)$	
70.	If $-3x + 17 < -13$ then $x \in$	1
	a) $(10, \infty)$ b) $[10, \infty)$	
	b) $[10, \infty)$ c) $(-\infty, 10)$	
	d) $[-10,10)$	
<u> </u>	·/ [-····/	1

ANSWERS:

Q. NO	ANSWER	MARKS
1.	(c) $x + x + 6 > 100 \implies 2x > 94 \implies x > 47$	1
	\Rightarrow minimum value of x is 48.	
2.	(a) $2x + 3x \le 500 \implies x \le 100 \implies 2x \le 200$	1
3.	(a)	1
4.	(a)	1

5.	(b)	1
6.	(c)	1
7.	(a)	1
8.	(a)	1
9.	(b)	1
10.	(c)	1
11.	$C. x \le 1$	1
12.	a. x>-3	1
13.	d. $x \ge 5$	1
14.	d. 0≤x≤40	1
15.	B. NULL SET	1
16.	bx > -5	1
17.	C. $x \le 2$; $x \in R$	1
18.	B. 2	1
19.	B. 1 <x<2< td=""><td>1</td></x<2<>	1
20.	a. cosec θ	1
21.	(d) y < 2	1
22.	(d) $1500x + 300y \le 30000; x + y \le 60, x \ge 0, y \ge 0$	1
23.	(c) $x \ge -11$	1
24.	(c) breadth x \ge 20 cm	1
25.	(d) (−∞, 2)	1
26.	(d) $(-\infty, 2) \cup (3, \infty)$	1
27.	(A)	1
28.	1	1
29.	(a)8 < x < 10	1
30.	(d) 4	1
31.	(c)	1
32.	(b)	1
33.	(d)	1
34.	(a)	1
35.	(a)	1
36.		1
37. 38.	(c) (b)	1
<u> </u>	(b) (b)	1
40.	(c)	1
40.	iii	1
42.	b	1
43.		1
44.	d	1
44.	l	

46.	2	1
	a .	1
47.	iv	1
48.	d	1
49.	а	1
50.	(−∞, 5)	1
51.	(c) breadth $x \ge 20$ cm	
52.	(a) $\mathbf{x} \in (10, \infty)$	
53.	(a) $x/b < y/b$	
54.	(c) $x \in (-\infty, -4) \cup (6, \infty)$	
55.	(b) $x \in (7, \infty)$	
56.	(b) $(-2, \infty)$	
57.	(c) $-1 \le x \le 2$	
58.	(c) numerical inequality	
59.	(d) literal inequality	
60.	(b) quadratic inequality	
61.	b	1
62.	d	1
63.	d	1
64.	a	1
65.	a	1
66.	с	1
67.	d	1
68.	b	1
69.	b	1
70.	a	1