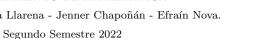


UNIVERSIDAD DEL BÍO-BÍO

FACULTAD DE CIENCIAS DEPARTAMENTO DE MATEMÁTICA





Guía N°3 Inecuaciones Cálculo I (220157)

RESUELVA LAS SIGUIENTES INECUACIONES CON SU RESPECTIVA RESPUESTA GRÁFICA.

1.
$$x + 2 < 4$$

2.
$$\frac{x}{2} > 4$$

3.
$$2x \le 4$$

4.
$$3 - 2x \ge 15$$

5.
$$\frac{3}{2}(1-x) > \frac{1}{4} - x$$

6.
$$3 - 3x < -1$$

7.
$$-2(x+4) > 1-5x$$

8.
$$\frac{x}{5} - 2 > \frac{2}{3}(x+3)$$

9.
$$\frac{2}{3}p + 4 > 10$$

10.
$$6x - 8 > x + 7$$

11.
$$(x-3)(x+1) < 0$$

12.
$$x^2 + 5x + 6 \ge 0$$

13.
$$(2x-1)(3x+4) > 0$$

14.
$$10x^2 - 19x + 6 \le 0$$

15.
$$5 - 4x - x^2 > 0$$

16.
$$1 - x - 2x^2 < 0$$

17.
$$|x| \le 3$$

18.
$$|x| > 6$$

19.
$$|x-4| \le 3$$

20.
$$|x-2| \le 5$$

21.
$$|x+1| < 3$$

22.
$$|x+4| \ge 2$$

23.
$$|3-x| > 1$$

24.
$$|x+1| \le 0$$

RESPUESTAS:

1.
$$x < 2$$

2.
$$x > 8$$

3.
$$x \le 2$$

4.
$$x \le -6$$

5.
$$x < \frac{5}{2}$$

6.
$$x > \frac{4}{3}$$

7.
$$x > 3$$

8.
$$x < -\frac{60}{7}$$

9.
$$p > 9$$

10.
$$x > 3$$

11.
$$-1 < x < 3$$

12.
$$x < -3$$
 o $x > -2$
13. $x < -\frac{4}{3}$ o $x > \frac{1}{2}$

14.
$$\frac{2}{5} \le x \le \frac{3}{2}$$

15.
$$-5 < x < 1$$

16.
$$x < -1$$
 o $x > \frac{1}{2}$

17.
$$-3 < x < 3$$

18.
$$x < -6$$
 o $x > 6$

19.
$$1 \le x \le 7$$

20.
$$-3 \le x \le 7$$

$$21. -4 < x < 2$$

22.
$$x < -6$$
 o $x > -2$

23.
$$x < 2$$
 o $x > 4$

24.
$$x = -1$$

1. $x + 2 < 4$	2 0				
$2. \frac{x}{2} > 4$	5) $\frac{3}{2}$ (1 - x	() 2 1 -	×		
		1			
$3. \ 2x \le 4$	2				
4. $3 - 2x \ge 15$	$\frac{3}{2} - \frac{3}{2}x$	3 1 x			
	LLL	1			
$5. \ \frac{3}{2}(1-x) > \frac{1}{4} - x$	3 4	2			
6. $3 - 3x < -1$	$\frac{3}{7} - \frac{7}{4}$	$\frac{3}{2}x - x$			
7. $-2(x+4) > 1-5x$	12 - 1	X			
	17 - 5 8	2			
$8. \ \frac{x}{5} - 2 > \frac{2}{3}(x+3)$	10	x			
	8	2			
	.5 >	X			
n) x < 2.	4	2			
	5 2 4 1	> X			
2) x > 8	4 1				
	10	> x			
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x 4 4/1					
x <u>4</u> 2	3 >	X			
	5 2 x 4				
4) 3 - 2x 2 15	x 4	5			
$-2x \ge 4s-3$		4			
x ≤ -6					
6) 3 - 3 x < - 1 /-	(8)	x 2 >	2 (,, 3)	/ - 115	
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-3+3x > 1					
3 2 2 7		3x - 30 >	10 X + 30		
3 x > 1+3		- 30 - 30 >			
x > 4/3		-60 >			
3		- <u>60</u> >	> X		
		7			
7)-2(x+4) > 1-5x		0			
		ΧC	- 60		
-2x-8>-1-5x/-	- 4		7		
2x+8 <-1+5x 8+1 < 5x-2x					
8+1 < 5x-2x					
q < 3x					
$\begin{array}{c} 9 < \chi \\ \hline 3 \\ 3 < \chi \end{array}$					
3 C X					

9. $\frac{9}{3}p + 4 > 10$ 10. $6x - 8 > x + 7$ 11. $(x - 3)(x + 1) < 0$ $6x - 8 > x + 9$ 11. $(x - 3)(x + 1) < 0$ $6x - 8 > x + 9$ 12. $x^2 + 5x + 6 \ge 0$ $6x > x + 9 + 9$ 13. $(2x - 1)(3x + 4) > 0$ 14. $10x^2 - 19x + 6 \le 0$ 15. $5 - 4x - x^2 > 0$ 16. $1 - x - 2x^2 < 0$ $(x - 3) + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + $			
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		6x-x > 8+7	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$=12 r^2 + 5r + 6 > 0$	5 × > 15	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-13 (2r-1)(3r+4) > 0	x > 15/5	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 10. (22 1)(02 + 1) > 0	X > 3	
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$\frac{3}{2} \Rightarrow 6 / 3$ $\frac{2}{3} \Rightarrow 6 / 3$	16 1 m 2m ² < 0	(v = 3) + D +	
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