UNIVERSIDAD DEL SURESTE

Campus Comitán

Licenciatura de Medicina Humana

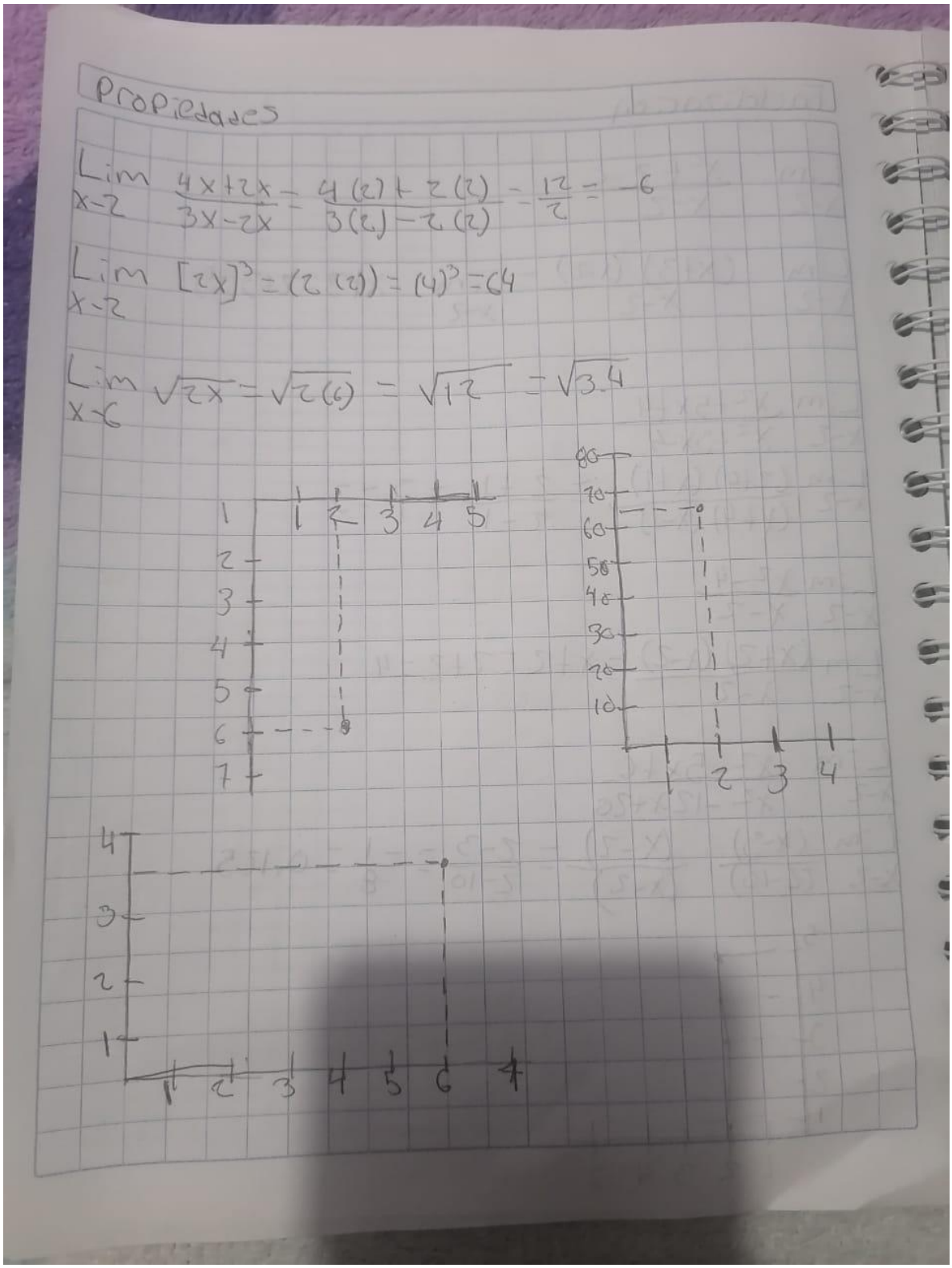
Nombre de la actividad: Poniendo Límites
Materia: Biomatemáticas

Alumno: Alan Aguilar Nájera

Grado: 2° Grupo: C

Nombre de Catedrático: Rosvani Margine Morales Irecta

Poniendo Límites



Factorizacion

$$\lim_{x \to 2} \frac{x^2 + 2 - 6}{x - 2}$$

$$\lim_{x \to 2} \frac{(x+3)(x-2)}{x-2} = \lim_{x \to 2} x + 3 = 2 + 3 = 5$$

$$\lim_{x \to 2} \frac{x^2 + 5x + 4}{x^2 + 3x - 4}$$

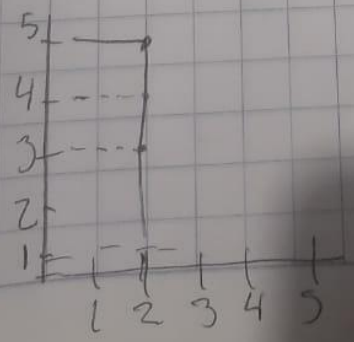
$$\lim_{x \to 2} \frac{(x+4)(x+1)}{(x+4)(x-1)} = \frac{2+1}{2-1} = \frac{3}{1} = 3$$

$$\lim_{x \to 2} \frac{x^2 - 4}{x - 2}$$

$$\lim_{x \to 2} \frac{(x+2)(x-2)}{x-2} = x + 2 = 2 + 2 = 4$$

$$\lim_{x \to 2} \frac{x^2 - 5x + 6}{x^2 - 12x + 20}$$

$$\lim_{x \to 2} \frac{(x-3)}{(2-10)} \frac{(x-2)}{(x-2)} = \frac{2-3}{2-10} = \frac{-1}{-8} = 0.125$$



Propiedades de los limites

$\lim_{x \to a} c = c$ $\quad \lim_{x \to 3} 5 = 5$

$\lim_{x \to a} x = a$ $\quad \lim_{x \to 3} x = 3$

$\lim_{x \to a} x^n = a^2$ $\quad \lim_{x \to 3} x^2 (3)^2 = 9$

$\lim_{x \to a} \sqrt{x} = \sqrt[n]{a}$ $\quad \lim_{x \to 2} \sqrt{2} = 1.41$

$\lim_{x \to 2} 4x^2$ $\quad 4 \lim_{x \to 2} x^2 = 4(2)^2 = 4(4) = 16$

$\lim_{x \to 2} 3x^3$ $\quad 3(2)^3 = 3(8) = 24$

$\lim_{x \to 4} 6x^2$ $\quad 6(4)^2 = 6(16) = 96$

$\lim_{x \to 3} 3x + 4x = 3(3) + 4(3) = 9 + 12 = 21$

$\lim_{x \to 2} 4x^2 \cdot 3x^2 = 4(2)^2 \; 3(2)^2 = 4(4) \cdot 3(4) =$
$16 - 12 = 192$

$4 \lim_{x \to 2} x^2 \cdot 3 \lim_{x \to 2} x^2$

$\lim_{x \to 2} \frac{x^2}{x^3} = \frac{\lim_{x \to 2} x^2}{\lim_{x \to 2} x^3}$

$\lim_{x \to 2} \frac{x^2 - 2}{x^3 + 3} = \frac{-2(\lim_{x \to 2} x^2)}{3(\lim_{x \to 2} x^3)} =$

$\frac{-2(2)^2 = -2(4)}{3(2)^3 = 3(8} = \frac{-8}{24} = 0.333$

PHG
PH9
PH5.5 $\lim_{x \to 6} x = 6(6) = 36$

$\lim_{x \to 9} x = 9(9) = 8$

$\lim_{x \to 5.5} x = 5.5(5.5) = 30.25$

Limites en matematicas
Una magnitud a lo que se acercan progresivamente los terminos de una secuencia infinita de magnitudes es decir expresa las tendencias

formula $\longrightarrow \lim_{x \to a} f(x) = L$

$\lim_{x \to 2.5} x^2 = \lim x^2 = (2.5)^2 = 6.25$

$\lim_{x \to 3} x^2 = \lim x^2 = (3)^2 = 9$

$\lim_{x-1} \frac{x^2-1}{x-1} = \lim x^2 = \frac{(x+1)(x-1)}{x-1} = (x+1) = (1+1) = 2$

$\lim x^2 = \lim x^2 = (7.2)^2 = 51.84$
$PH(x) \to 7.2$

$\lim x^2 = \lim x^2 = (7.4)^2 = 54.76$
$PH(x) \to 7.4$

$\lim x^2 = \lim x^2 = (7.6)^2 = 57.76$
$PH(x) \to 7.6$

$\lim_{pH\, x \to 6.6} x^2 = \lim x^2 = (6.6)^2 = 43.56$

$\lim_{pH\,(x) \to 7.6} x^3 = \lim x^3 = (7.6)^3 = 438.97$

$\lim_{pH\,(x) \to 7.8} x^3 = \lim x^3 = (7.8)^3 = 474.55$

$\lim_{pH\,(x) \to 8} x^4 = \lim x^4 = (8)^4 = 4,096$