



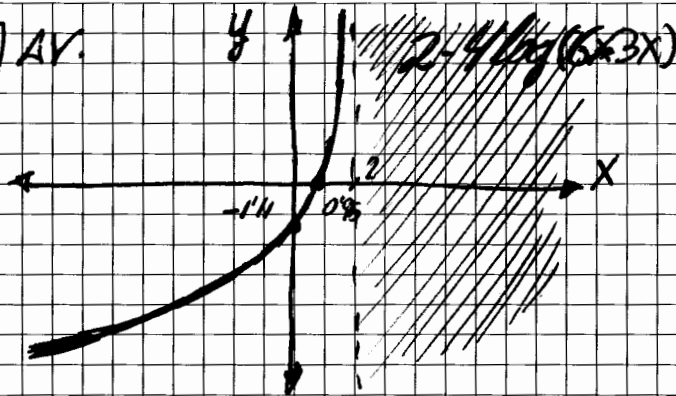
**COLEGIO ALMA'S**  
bilingual school

APELLIDOS Y NOMBRE: Corrección 2° Semestral U.S.S.1

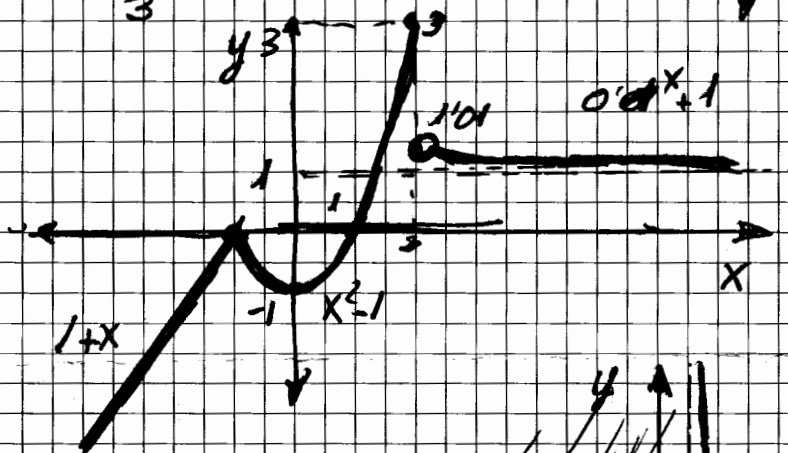
CURSO: 1° Bachillerato N° 2° Evaluación

FECHA: 21-02-2018 ASIGNATURA: Matemáticas

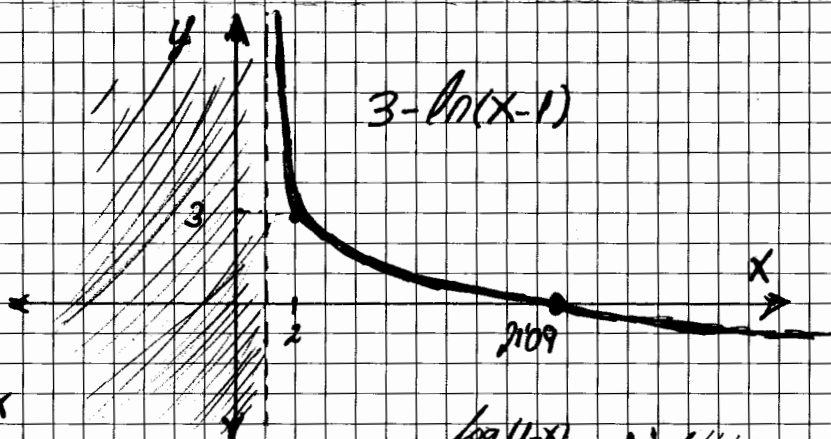
1/5)  $6-3x=0 \rightarrow 3x=6 \rightarrow \boxed{x=2}$  AV.  
 $2-4\log(6-3x) \neq 0$   
 $\log(6-3x) = \frac{1}{2}$   
 $6-3x = 10^{\frac{1}{2}}$   
 $3x = 6 - \sqrt{10}$   
 $x = \frac{6-\sqrt{10}}{3} = 0,95 \approx 0x$



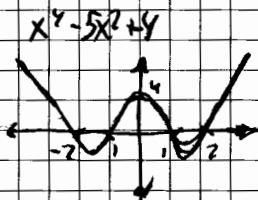
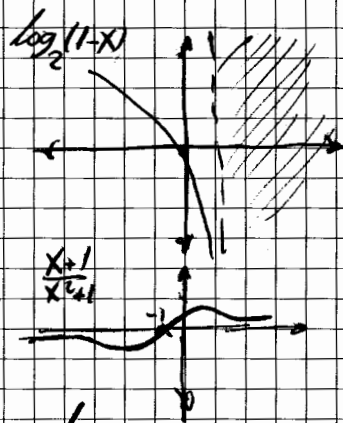
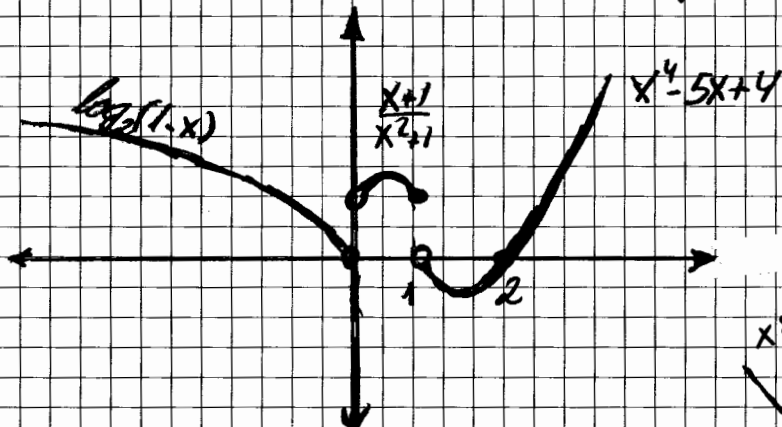
2/5)



3/5)  $x-1=0 \rightarrow \boxed{x=1}$  AV.  
 $3-\ln(x-1) = 0$   
 $\ln(x-1) = 3$   
 $x-1 = e^3$   
 $x = e^3 + 1 = 21,09 \approx 0x$



4/5)





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APELLIDOS Y NOMBRE: .....

CURSO: ..... N° .....

FECHA: ..... ASIGNATURA: .....

$$(5) y' = \frac{2(x+2) \cdot 1}{4} = \frac{x+2}{2}$$

$$(6) y' = 2x\sqrt{2x-x^2} + x^2 \cdot \frac{2-2x}{2\sqrt{2x-x^2}} = 2x\sqrt{2x-x^2} + \frac{x^2(1-x)}{\sqrt{2x-x^2}}$$

$$(7) y' = \frac{1+e^x}{4 \cdot \sqrt[4]{(x+e^x)^3}}$$

$$(8) y' = 3 \cdot \frac{1}{\frac{x+1}{3}} = 3 \cdot \frac{1}{x+1} = \frac{3x+2}{x+1}$$

$$(9) y' = \left(3 - \frac{1}{2\sqrt{x}}\right) 2^{3x-\sqrt{x}} \ln 2$$

$$(10) y' = (12x^2 - 4x) 2^{4x^3-2x^2} \ln 2$$

$$(11) y' = \frac{2x}{x^2} - \frac{e^x}{e^x} = \frac{2}{x} - 1$$

$$(12) y' = \frac{\frac{1}{x^2+1} (x^2+1) - 2x \operatorname{arctg} x}{(x^2+1)^2} = \frac{1 - 2x \operatorname{arctg} x}{(x^2+1)^2}$$