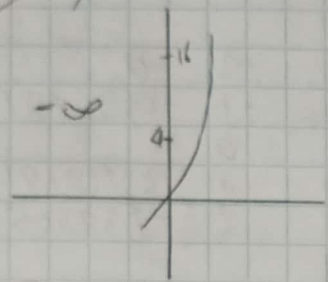
Taller del Ejercicio S.1.

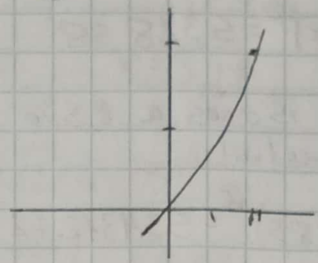
(1) Nombre: Fernando Montoya Curso: 2do "C"

(1) $y = f(x) = 4^x$



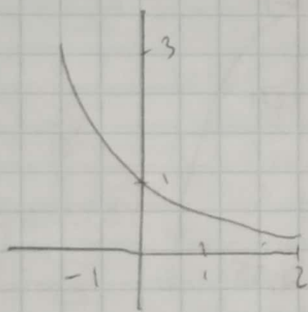
0	1
1	4
2	16

(9) $y = f(x) = 2^x - 1$



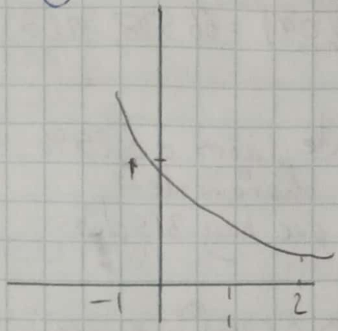
0	0
1	1
2	3

(3) $y = f(x) = (1/3)^x$



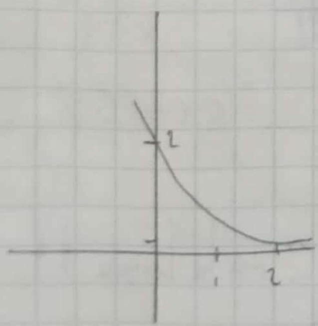
-1	3
0	1
1	1/3
2	1/9

(11) $y = f(x) = 2^{-x}$



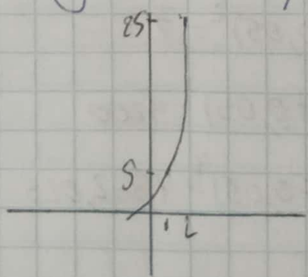
-1	2
0	1
1	1/2
2	1/4

(5) $y = f(x) = 2(1/4)^x$



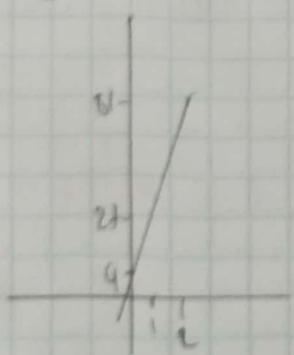
0	2
1	1/2
2	1/4

(13) De la curva A, B y C ¿Cuál es la gráfica de $y = 5^x$?



0	1
1	5
2	25

(7) $y = f(x) = 3^{x+2}$



0	9
1	27
2	81

(15)

$p = 125000\ (1{,}11)^{t/20}$

$p = 125000\ (1{,}11)$

$p = 125000\ (1{,}11)$

$p = 138750$

(14)

$p = 1 - \frac{1}{2}(1-c)^{n-1},\ n \geq 1,\ 0 < c < 1$

$p = 1 - \frac{1}{2}(1-c)^{0}$ $p = ?$ $n = 1$

$p = 1 - \frac{1}{2}$

$p = \frac{1}{2}$

(19) $Total = a^{\cdot}(1+r)^{n}$

$4000 \cdot (1+0,06)^{7} = 6014,54$

(21) 700 durante 15 años a 7% compuesto cada semestre

$700\,(1+0,07)^{30} = 5328,58$

(23) 4000 durante 15 años a 8,5% compuesto trimestral

$4000\,(1+0,085)^{60} = 534372.724$

(25) 8000 durante 2.5 años a 9% compuesto mensualmente

$8000\,(1+0,09)^{30} = 66538,3423$

(27) 8000 durante 3 años a 6,25% compuesto diariamente (Suponiendo que hay 365 días en un año)

$8000\,(1+0,0625)^{1095} = 5,411 \times 10^{32}$

(29) $1000\,(1+0,05)^{8} = 1477,46$

(31) a) $N(1+0,05)^{2} = T$

b) $4000(1+0,05)^{1} = 4200$

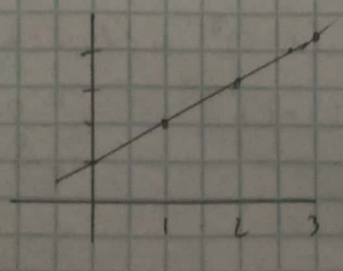
c) $4000\,(1+0,05)^{4} = 4862,025$

(33) $N(1+0,3)^{2} = T_1$

$N(1+0,3)^{1} = T_2$

$N(1+0,3) = T_3$

$N(1+0,3) = T_4$



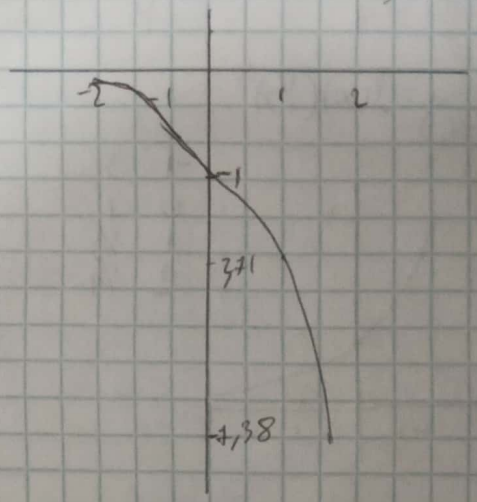
(35) $100.000(1+0,01)^{3} = 970299$

(37) $e^{1.5} = 4,4817$

(39) $e^{-0,7} = 0,4966$

(41) $y = -e^{x}$

-2	-0
-1	-0,36787
0	-1
1	-2,718281
2	-7,38805



(43) $P = \frac{e^{-3}\,3^{x}}{x!}$ $\quad x = 3$

$P = \frac{3^{3}}{e^{3}\,3!} = 8,0655\,\%$

(48) Exprese e^{kt} en la forma b^{t}

$b = e^{k}$

$e^{kt} = b^{t}$

(47) $N = 10e^{-0,0281}$

$N = 10$

$N = 10e^{-0028 \cdot 10}$

$N = 7,558g$

$N = 10e^{-0,028 \cdot 50}$

$N = 2,467g$

Alrededor de 2000 o mas

(49) $m(7) = m\,2^{-\frac{1}{8}}$

$\frac{1}{16}0 = 1g\,2^{-\frac{1}{8}}$

$-\frac{1}{2} = \log_2 \frac{1}{16}$

$t = 2 \log_2 \frac{1}{16}$

$t = 8 \log_2 (16)$

$t = 32$ horas

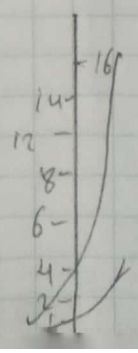
(51) $P(x=k) = \frac{4^k e^{-4}}{k!}$

Mi promedio de numeros de casos admitidos de emergencia en cierto hospital en 1 hora

$P(x=4) = \frac{4^2 \cdot e^{-4}}{2!}$

$P = 0,1465$ //

(53) Grafique $y = 2^x$ y $y = 4 \cdot 2^x$



0	1	4
1	2	8
2	4	16

no es cierta

(55) Para $y = 2^x$, determine $x = 5 \cdot y = a$ Redondee su respuesta a dos decimales

$a = 2^x$

$\log_2 9 = x$

$x = 3,17$ //

(57) $N(1+0,05)^a = 1$

$400(1+0,05)^a = 1000$

$(1+0,05)^a = \frac{1000}{400} = \frac{10}{4}$

$\log_{1,05} \frac{10}{4} = a$

$a = 18,78$ //

(59) $3000(1+0,045)^x = 6000$

$(1+0,045)^x = 2$

$\log_{1,045} 2 = x$

$x = 15,75$ //