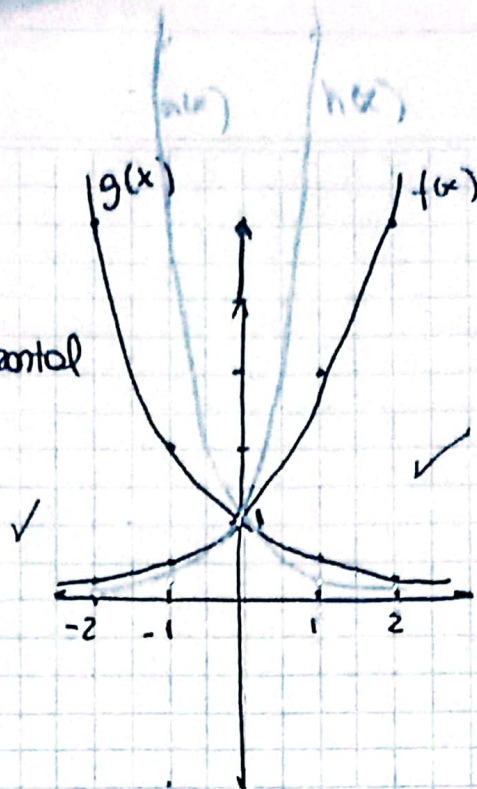


①

1. $f(x) = 2^x$

$a > 1$ = creciente
asintota horizontal

x	2^x
-2	0.25
-1	0.5
0	1
1	2
2	4



$g(x) = 1/2^x$

$a < 1$ decrec.
asint. horiz.

x	$1/2^x$
-2	4
-1	2
0	1
1	0.5
2	0.25

ii

$h(x) = 4^x$ - crec.
 $a > 1$

x	4^x
-2	0.06
-1	0.25
0	1
1	4
2	16

$m(x) = 4^{-x}$

x	4^{-x}
-2	16
-1	4
0	1
1	0.25
2	0.06

② graficos con base ≥ 1 son simetricos con respecto eje y
funciones con base ≥ 1 son crecientes y funciones con base < 1 son decrecientes entre 0 y 1

② grafico 1 = $f(x)$
asintota = $y = -1$

grafico 2 = $g(x)$
asintota $y = 2$

③ ① $2^x = \frac{1}{8}$
 $x = -3$

③ b $2^{x+3} = 16$
 $2^x \cdot 2^3 = 16$
 $2^x = 2$
 $x = 1$

③ c $3^{x-2} = 1$
 $3^x : 3^2 = 1$
 $3^x : 9 = 1$
 $3^x = 9$
 $x = 2$

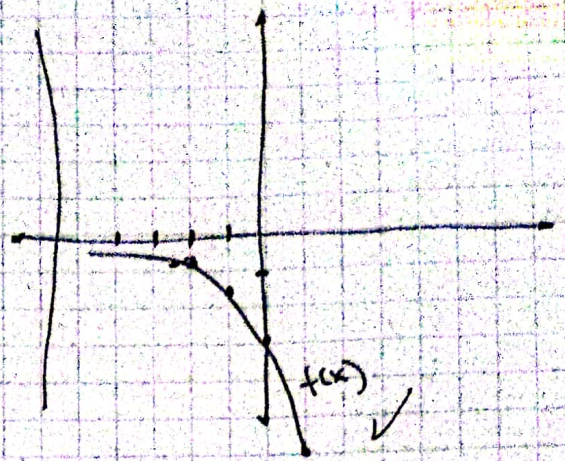
③ d $\left(\frac{1}{3}\right)^{x+1} - 9 = 0$
 $\frac{1}{3} \cdot \frac{1}{3} = 9$
 $\frac{1}{3} \cdot \frac{1}{3} = 27$
 $x = -3$

① $f(x) = -3.2^x$

$\approx -6^x$

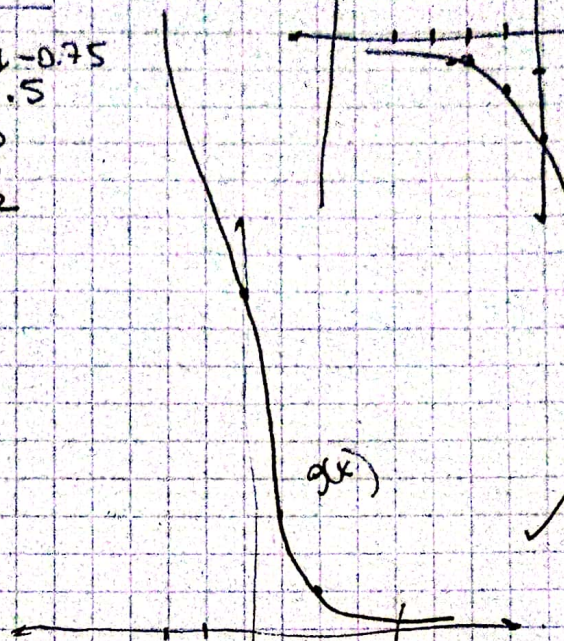
x	-6^x
-2	-0.02
-1	-0.17
0	-1
1	-6
2	-36

x	-3.2^x
-2	-0.75
-1	-1.5
0	-3
1	-6
2	-12



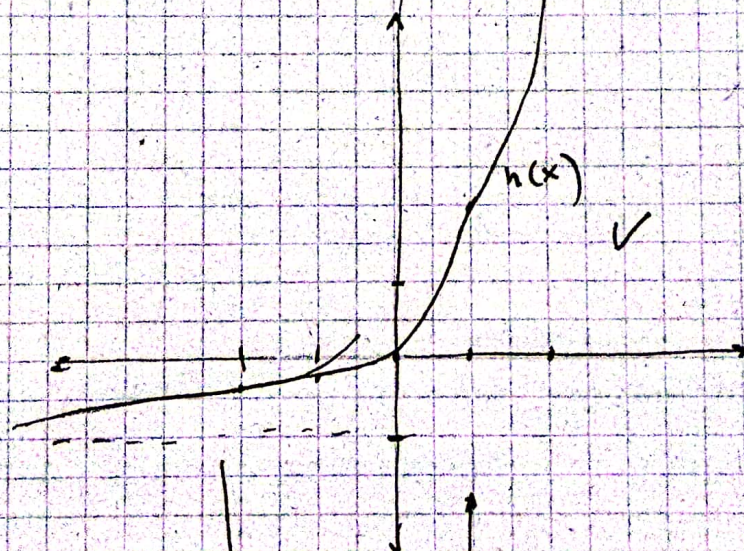
$g(x) = \left(\frac{1}{3}\right)^{x-2}$

x	$\left(\frac{1}{3}\right)^{x-2}$
-2	81
-1	27
0	9
1	3
2	1



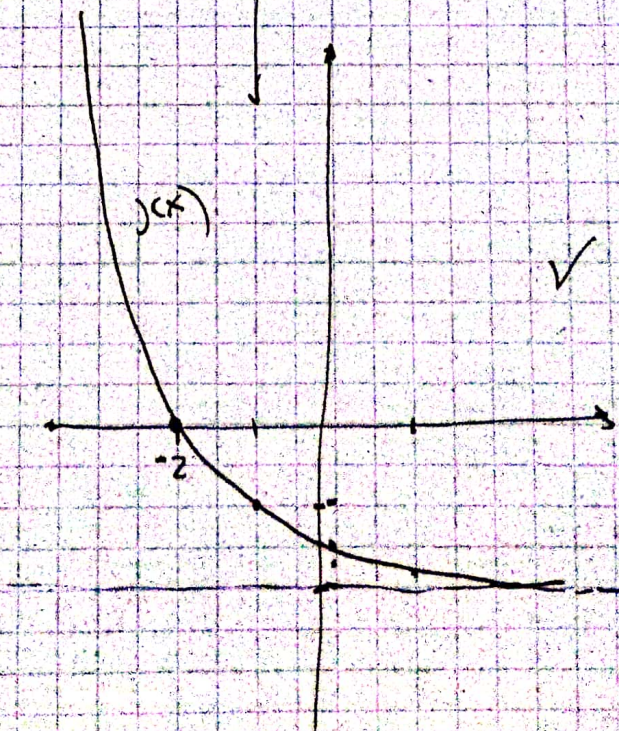
$h(x) = 3^x - 1$

x	$3^x - 1$
-2	-0.88
-1	-0.66
0	0
1	2
2	8



$j(x) = \left(\frac{1}{2}\right)^{x+1} - 2$

x	$\left(\frac{1}{2}\right)^{x+1} - 2$
-2	0
-1	-1
0	-1.5
1	-1.75
2	-1.875



	Interv.	g_x	g_y	C^+	C^-	I_c	I_d	Corr	Asimptota
$f(x) = \begin{pmatrix} -\infty \\ 0 \end{pmatrix}$	\mathbb{R}	\mathbb{R}	$y=3$	\mathbb{R}	\mathbb{R}^-	\mathbb{R}	\mathbb{R}	100%	$x=0$
$g(x) = \begin{pmatrix} 0 \\ +\infty \end{pmatrix}$	\mathbb{R}	\mathbb{R}	$y=9$	\mathbb{R}^+	\mathbb{R}	\mathbb{R}	\mathbb{R}	2 decen	$x=0$
$h(x) = \begin{pmatrix} -1 \\ \mathbb{R}^+ \end{pmatrix}$	$x=0$	$y=0$	$(0, +\infty)$	$(-\infty, 0)$	\mathbb{R}	\mathbb{R}	\mathbb{R}	1 decen	$x=-1$
$j(x) = \begin{pmatrix} \mathbb{R}^+ \\ -2 \end{pmatrix}$	$x=-2$	$y=-1.5$	$(-\infty, -2)$	$(-2, +\infty)$	\mathbb{R}	\mathbb{R}	\mathbb{R}	129 2 decen	$x=-2$

(5) ☒ Falso ✓

$f(x) = \left(\frac{2}{3}\right)^x - 1$ es decreciente porque base < 1 y si como $g(x)$

(b) Falso

$f(x) = 4^{x-2} + 3$ tiene asíntota $y = 3$.

(c) Falso ✓

$f(x) = 2^{x+3} - 4$ corta $g(x) = (-1, 0)$
 $g(y)$

(d) verdadero ✓

(e) $g(x) = \left(\frac{3}{2}\right)^{x+2} - 4$ Falso ✓. 2 y 4 decen