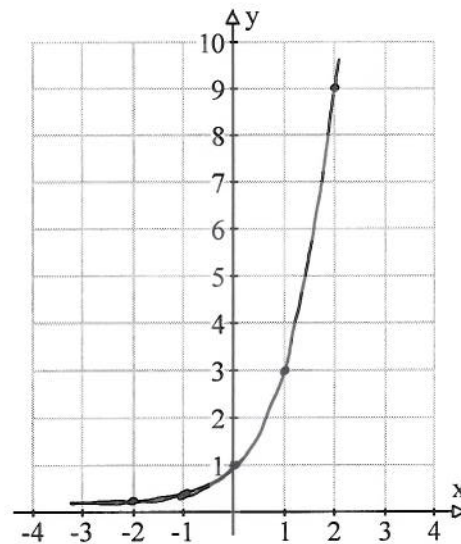


1) Graph

$$f(x) = 3^x$$

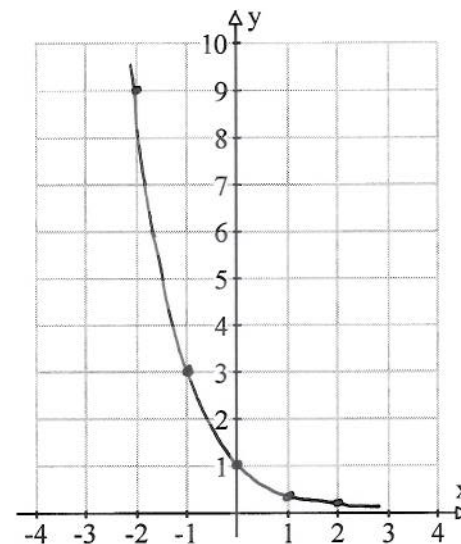
x	3^x
-2	$3^{-2} = \frac{1}{9}$
-1	$3^{-1} = \frac{1}{3}$
0	$3^0 = 1$
1	$3^1 = 3$
2	$3^2 = 9$



2) Graph

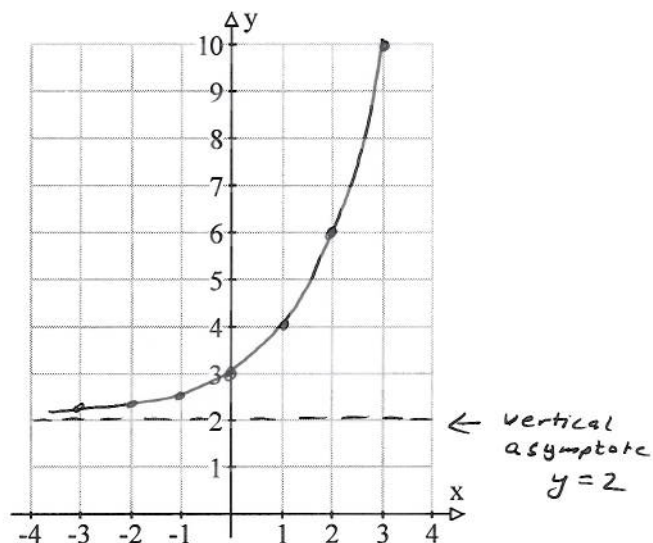
$$f(x) = \left(\frac{1}{3}\right)^x$$

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



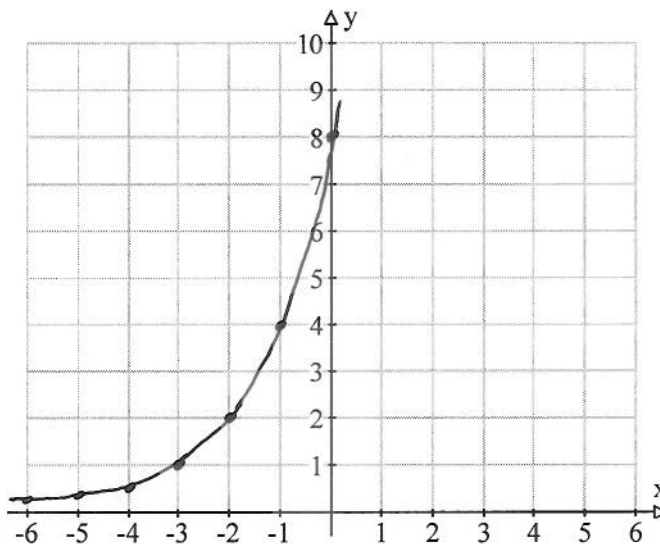
3) Graph $f(x) = 2^x + 2$

x	$2^x + 2$
-3	$2^{-3} + 2 = \frac{1}{2^3} + 2 = 2\frac{1}{8}$
-2	$2^{-2} + 2 = \frac{1}{2^2} + 2 = 2\frac{1}{4}$
-1	$2^{-1} + 2 = \frac{1}{2} + 2 = 2\frac{1}{2}$
0	$2^0 + 2 = 1 + 2 = 3$
1	$2^1 + 2 = 4$
2	$2^2 + 2 = 4 + 2 = 6$
3	$2^3 + 2 = 8 + 2 = 10$



4) Graph $f(x) = 2^{x+3}$

x	2^{x+3}
-6	$2^{-6+3} = 2^{-3} = \frac{1}{8}$
-5	$2^{-5+3} = 2^{-2} = \frac{1}{4}$
-4	$2^{-4+3} = 2^{-1} = \frac{1}{2}$
-3	$2^{-3+3} = 2^0 = 1$
-2	$2^{-2+3} = 2^1 = 2$
-1	$2^{-1+3} = 2^2 = 4$
0	$2^{0+3} = 2^3 = 8$



Graph $f(x) = \left(\frac{1}{2}\right)^{x-2}$

x	$\left(\frac{1}{2}\right)^{x-2}$
-1	$\left(\frac{1}{2}\right)^{-1-2} = \left(\frac{1}{2}\right)^{-3} = 2^3 = 8$
0	$\left(\frac{1}{2}\right)^{0-2} = \left(\frac{1}{2}\right)^{-2} = 2^2 = 4$
1	$\left(\frac{1}{2}\right)^{1-2} = \left(\frac{1}{2}\right)^{-1} = 2^1 = 2$
2	$\left(\frac{1}{2}\right)^{2-2} = \left(\frac{1}{2}\right)^0 = 1$
3	$\left(\frac{1}{2}\right)^{3-2} = \left(\frac{1}{2}\right)^1 = \frac{1}{2}$
4	$\left(\frac{1}{2}\right)^{4-2} = \left(\frac{1}{2}\right)^2 = \frac{1}{4}$
5	$\left(\frac{1}{2}\right)^{5-2} = \left(\frac{1}{2}\right)^3 = \frac{1}{8}$

