

Ch.4b Exponential and Rational Models

What does a sea urchin embryo
know about exponents?



An exponential function has the basic form $y = a^x + c$.

It's called an "exponential" function because the variable is in the exponent.

Graph $y = 2^x$. First, complete the table.
Then graph the function.

x	y
-3	$\frac{1}{8}$
-2	$\frac{1}{4}$
-1	$\frac{1}{2}$
0	1
1	2
2	4
3	8

Y-intercept:

$(0, 1)$

Horizontal
Asymptote:

$y = 0$

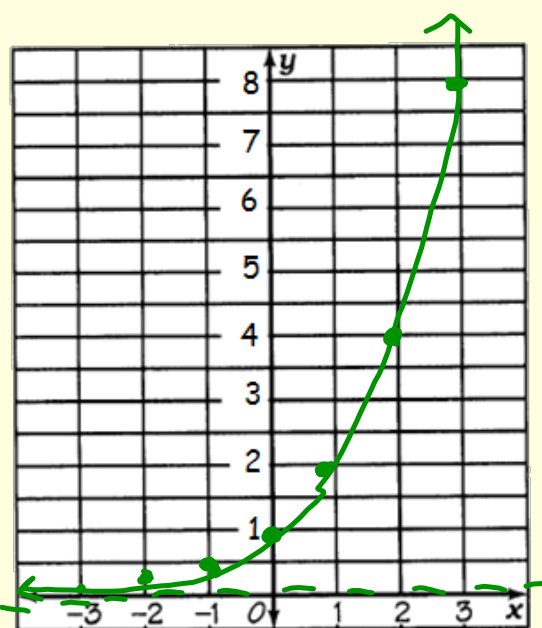
Domain:

$x \in \mathbb{R}$

Range:

$y > 0$

Is this function increasing or decreasing?



Homework Assignment:

complete Worksheet 1-4 all

*graphs will be collected and graded