

## 3.3 Practice Activity

### Practice 3.3-1-1:

Identifying Exponential Functions: Identify the base of the exponential function. And find its value. Round to the nearest hundredth.

- a.  $f(x) = -4^3$
- b.  $f(x) = 4^3$
- c.  $f(x) = (-4)^3$
- d.  $f(x) = -4e^3$

### Practice 3.3-2-1:

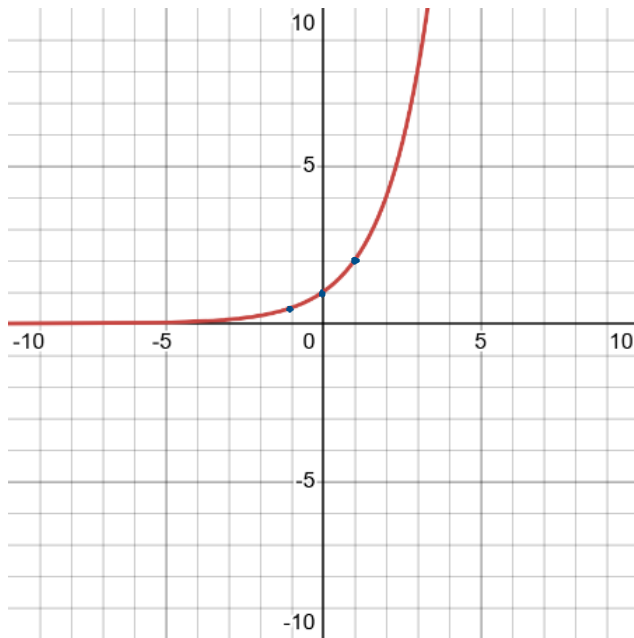
Graph the function.

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

a) Complete the table

x	f(x)	(x, y)
-1	$\left(\frac{1}{2}\right)^{-1} = 2$	(-1,2)
0	$\left(\frac{1}{2}\right)^0 = 1$	(0,1)
1	$\left(\frac{1}{2}\right)^1 = 0.5$	(1,0.5)

- b) Can we use  $x=-2$ ?
- c) Can we use other  $x$  values?
- d) Any  $x$  value that we cannot use? Why.
- e) Select the correct graph.



### Practice 3.3-3-1:

Solve Elementary Exponential Equations.

$$9^{x+3} = \frac{1}{3}$$

Non-Prime Number Base
fraction and prime denominator