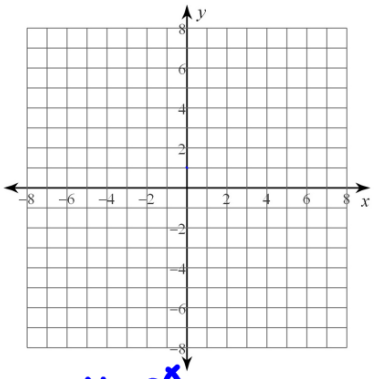
The natural base, e, is irrational. It can be defined as stated below:

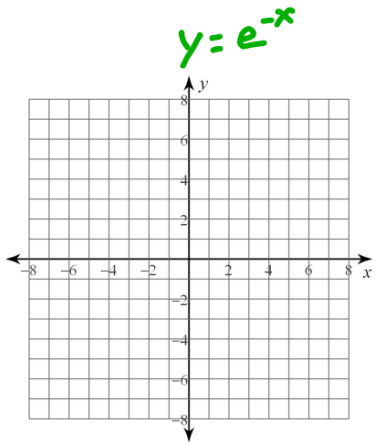
A natural base exponential function is shown below:

exponential growth when

exponential decay when

Basic functions with *e* are graphed below:





A natural logarithm will have *e* as a base.

Solve for the unknown; round to four decimal places.

$$e^{8k} + 3 = 28$$

Solve for the unknown; round to four decimal places.

$$e^{7v} + 3 = 63$$

Solve for the unknown; round to four decimal places.

$$3e^{0.7r} = 54$$

Solve for the unknown; round to four decimal places.

$$-2e^{7n} = -10$$

Solve for the unknown; round to four decimal places.

$$e^{p+2} - 1.5 = 17$$

Solve for the unknown; round to four decimal places.

$$e^{-5n} + 3 = 54$$

Solve for the unknown; round to four decimal places.

$$e^{x-1} - 1 = 7$$

Solve for the unknown; round to four decimal places.

$$9e^{-4n} = 51$$