Exponential Functions



a = initial value

b = growth / decay factor

Example 2.

The value of a brand new boat is $500,000. Write a model to represent the boats value V (in thousand dollars) in function of the number of years.

Rate of depreciation = 4%, yearly.

Solution:



b). Find the boats value when t = 6 years.

V(6)=500(0.96)^6

Find an exponential function to represent:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 2 | 3 | 4 | 5 | 6 |
| y | 1/3 | 1.00 | 3.00 | 9.00 | 27.00 |