

Decreasing Rate of Change and Initial Value from Situations

Identify the independent and dependent variable, the rate of change, the initial value. Make a table, graph and equation representing the relationship. Be sure to label the axis on the graph.

Example: Martin bought a 500 pack of paper. He uses 20 sheets a day.

Independent Variable (x): # of Days      Dependent Variable (y): Total Sheets

x	y
0	500
1	480
2	460
3	440
4	420
5	400

-20 Rate of Change: -20

-20

-20

-20

-20

Initial Value: 500

Equation ("logical" way):  $y = 500 - 20x$

Equation ("traditional" way):  $y = -20x + 500$

