

APRIL 29/09

EXPONENTIAL GROWTH AND DECAY

$$y = a b^x$$

a = STARTING NUMBER

$$b = (1 + \% \text{ GAIN})$$
$$= (1 - \% \text{ LOSS})$$

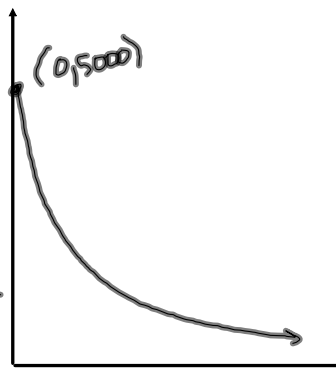
EXPONENTIAL PROBLEMS

Q#1

$$y = 5000(1 - .043)^x$$

a) AFTER 6 YRS
THE POP IS
3840.98

b) THE POP WILL
HIT 3000 IN
11.6 yrs.



$$2. y = 32000(1 + .055)^x$$

IT TAKES 4.17 yrs
TO REACH 40000.