



### How to do problem 3

#### Question 2

T ½ year       $BR = 1000/1000 = 1$        $DR = 100/1000 = 0.1$        $r = BR - DR = 1 - 0.1 = 0.9$   
 $G = rN = 0.9 \times 1000 = 900$  NEW crickets       $G+N = 900 + 1000 = 1900$  crickets after ½ year

#### Question 3

T 1 year       $G = rN = 0.9 \times 1900 = 1710$  new crickets       $G+N = 1710 + 1900 = 3610$  crickets after 1 year

T 1.5 year       $G = rN = 0.9 \times 3610 = 3249$  new crickets       $G+N = 3249 + 3610 = 6859$  crickets after 1.5 years

Continue pattern until T 5.0 years and graph