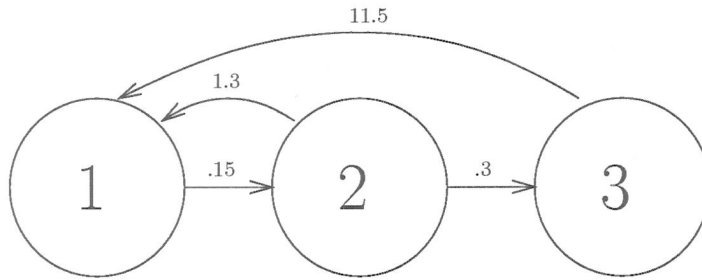


Quiz #16

Name: \_\_\_\_\_

You must show your work to get full credit.



A species of rodent has three lives three years with its life history summarized in the circle diagram above.

1. Use this to complete the following table:

$x \backslash t$	0	1	2
1	100	70.5	54
2	10	15	10.575
3	5	3	4.5

$$10(1.3) + 5(11.5) = 70.5$$

$$100(.15) = 15$$

$$10(.3) = 3$$


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$$(15)(1.3) + 3(11.5) = 54$$

$$(70.5)(.15) = 10.575$$

$$15(.3) = 4.5$$

2. What is the total number of rodents in year 1?

Total number is \_\_\_\_\_

$$70.5 + 15 + 3 = 88.5$$

88.5

3. What is the percentage in each age group in year 1?

Percent in stage 1 \_\_\_\_\_

79.66%

$$\frac{70.5}{88.5} = .7966$$

Percent in stage 2 \_\_\_\_\_

16.95%

$$\frac{15}{88.5} = .1695$$

Percent in stage 3 \_\_\_\_\_

3.39%

$$\frac{3}{88.5} = .0339$$