

Mathematics 172

Quiz # 20

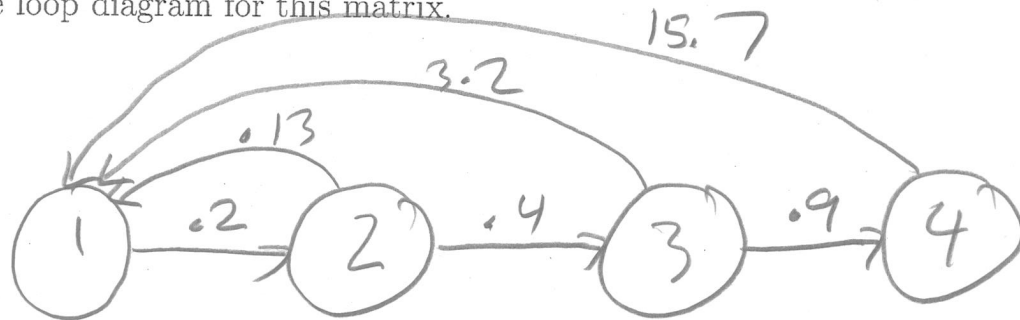
Name: Key

You must show your work to get full credit.

Consider the Leslie matrix

$$L = \begin{bmatrix} 0 & .13 & 3.2 & 15.7 \\ .2 & 0 & 0 & 0 \\ 0 & .4 & 0 & 0 \\ 0 & 0 & .9 & 0 \end{bmatrix}$$

1. Draw the loop diagram for this matrix.



2. What is the meaning of the number 3.2 in this matrix?

Stage 3 individuals have on the average 3.2 offspring spring.

3. What is the meaning of the number .9 in this matrix?

That the proportion of stage 3 individuals that survive to stage 4 is .9