1. *You are given the following information about three policyholders:

| Age at policy <br> purchase | Age at policy <br> termination | Reason for policy <br> termination |
| :---: | :---: | :---: |
| 74.0 | 75.8 | Death |
| 75.0 | 76.5 | Death |
| 75.5 | 75.9 | Death |

Calculate the estimate for $q_{75}$ obtained from these data, using the exact exposure method.

For numbers 2 and 3 , you only need to do the ones highlighted in yellow for the class. The rest are there in case you just want to have fun and see all the other options.
2. Jeff was born on 11-1-1955. Jeff purchased a life insurance policy on 7-1-2005. Jeff died on 4-12018.

A mortality study is being conducted which includes Jeff's policy. The Study goes from 1-1-2016 to 12-31-2018. Complete the following table assigning months of exposure for each age listed for Jeff's policy.

| Age | Exposure <br> Method | Calendar <br> Versus <br> Anniversary | Age 59 | Age 60 | Age 61 | Age 62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exact Age | Exact | Calendar Yr. |  |  |  |  |
| Exact Age | Exact | Anniversary |  |  |  |  |
| Exact Age | Actuarial | Calendar Yr. |  |  |  |  |
| Exact Age | Actuarial | Anniversary |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Exact | Calendar Yr. |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Exact | Anniversary |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Actuarial | Calendar Yr. |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Actuarial | Anniversary |  |  |  |  |

3. Jeff was born on 11-1-1955. Jeff purchased a life insurance policy on 7-1-2016. Jeff was alive at the end of the study

A mortality study is being conducted which includes Jeff's policy. The Study goes from 1-1-2016 to 12-31-2018. Complete the following table assigning months of exposure for each age listed for Jeff's policy.

| Age | Exposure <br> Method | Calendar <br> Versus <br> Anniversary | Age 59 | Age 60 | Age 61 | Age 62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exact Age | Exact | Calendar Yr. |  |  |  |  |
| Exact Age | Exact | Anniversary |  |  |  |  |
| Exact Age | Actuarial | Calendar Yr. |  |  |  |  |
| Exact Age | Actuarial | Anniversary |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Exact | Calendar Yr. |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Exact | Anniversary |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Actuarial | Calendar Yr. |  |  |  |  |
| Insuring <br> Age Last <br> Birthday | Actuarial | Anniversary |  |  |  |  |

