1. Take the Satisfaction with Life Scale (Diener et al., 1985), then create a mean composite score.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

\_\_\_\_\_\_\_ In most ways my life is close to my ideal.

\_\_\_\_\_\_\_ The conditions of my life are excellent.

\_\_\_\_\_\_\_ I am satisfied with my life.

\_\_\_\_\_\_\_ So far I have gotten the important things I want in life.

\_\_\_\_\_\_\_ If I could live my life over, I would change almost nothing.

\_\_\_\_\_\_\_ Satisfaction with Life Score (Mean)

2. Turn this count data into percentage data. There were 150 bees in every generation.

|  |  |
| --- | --- |
| Number of bees bred in second generation that have no stripes | Percentage of bees bred in second generation that have no stripes |
| 13 |  |
| 5 |  |
| 10 |  |
| 2 |  |
| 8 |  |
| 4 |  |

3. Create a new variable (speed) by combining two existing variables (distance and time).

|  |  |  |
| --- | --- | --- |
| Miles of Travel (Distance) | Hours of Travel (Time) | Miles per Hour (Speed) |
| 356 | 7 |  |
| 560 | 9 |  |
| 235 | 3 |  |
| 114 | 2 |  |
| 389 | 5 |  |
| 581 | 7 |  |

4. Your HbA1c data is exponentially distributed. Use a natural log transformation to make it normally distributed.

|  |  |
| --- | --- |
| HbA1c | ln\_HbA1c |
| 1.34 |  |
| 2.00 |  |
| 0.16 |  |
| 10.19 |  |