Assignment 6

Q. In a Rubik's cube competition 200 participants qualified with a qualification criteria of solving under 10 minutes. The time to solve the cube (in minutes) for these 200 participants is stored in a data vector **rubiktime** as follows:

4.6, 5.2, 5.7, 7.3, 5.1, 6.2, 6.6, 6.0, 7.7, 9.2, 7.1, 9.1, 7.3, 5.1, 7.1, 9.2, 7.4, 8.8, 8.7, 4.8, 7.7, 6.7, 6.4, 7.3, 9.3, 7.4, 4.2, 5.2, 5.4, 5.4, 6.9, 4.7, 5.4, 5.4, 8.2, 4.3, 5.4, 7.6, 7.5, 4.7, 6.6, 5.0, 6.7, 6.4, 6.2, 7.9, 5.8, 8.0, 6.3, 6.5, 5.2, 6.8, 5.1, 5.6, 4.6, 6.8, 7.8, 6.1, 7.9, 5.6, 6.6, 5.8, 7.5, 7.2, 7.3, 5.3, 5.8, 4.8, 5.0, 7.4, 5.4, 4.9, 6.1, 7.1, 5.3, 5.4, 5.8, 5.4, 4.2, 8.4, 8.0, 9.8, 4.5, 5.1, 6.2, 8.6, 5.4, 5.5, 9.1, 4.4, 5.0, 5.4, 5.8, 6.4, 8.8, 5.0, 4.7, 5.1, 8.3, 4.6, 5.3, 8.8, 6.0, 6.6, 7.7, 4.5, 4.6, 5.9, 7.3, 8.1, 7.2, 6.4, 6.7, 4.8, 7.7, 5.8, 5.1, 8.5, 5.4, 8.7, 5.4, 6.3, 8.9, 7.6, 6.0, 5.1, 4.3, 7.9, 5.4, 7.5, 5.4, 5.0, 7.9, 7.6, 5.5, 7.1, 6.1, 6.0, 7.2, 9.1, 7.4, 4.2, 8.9, 4.4, 7.1, 7.0, 7.7, 6.1, 4.9, 9.3, 4.8, 8.1, 4.4, 7.5, 4.2, 5.3, 4.9, 9.0, 5.2, 5.2, 5.4, 5.9, 6.4, 7.2, 7.5, 4.3, 5.8, 7.9, 5.3, 6.1, 6.1, 4.3, 6.0, 7.7, 4.8, 7.6, 5.4, 4.9, 9.7, 6.4, 4.8, 6.4, 5.8, 4.7, 7.3, 5.2, 6.8, 6.6, 8.4, 4.4, 8.7, 8.9, 6.7, 7.6, 5.7, 7.4, 7.6, 7.5, 9.0, 7.9

1. The third raw moment of the data in **rubiktime** is
2. The difference between fourth and second raw moments of the data in **rubiktime** is
3. The second central moment of the data in **rubiktime** is
4. The difference between fourth and third central moments of the data in **rubiktime** is
5. The second absolute moment of the data in **rubiktime** is
6. The difference between fourth and third absolute moments of the data in **rubiktime** is
7. The frequency distribution of the data in **rubiktime** is

8. The coefficient of skewness (γ1) moment of the data in **rubiktime** is

9. The frequency distribution of the data in **rubiktime** is

10. The coefficient of kurtosis (γ2) moment of the data in **rubiktime** is

Q. In a Rubik's cube competition 200 participants qualified with a qualification criteria of solving under 10 minutes. The time to solve the cube (in minutes) for these 200 participants were supposed to be recorded but six timers were faulty and their data were discarded (denoted as **NA**). The data was then stored in a data vector **rubiktimena** as follows:

4.6, 5.2, 5.7, 7.3, 5.1, 6.2, 6.6, 6.0, 7.7, 9.2, 7.1, 9.1, 7.3, 5.1, 7.1, 9.2, 7.4, 8.8, 8.7, 4.8, 7.7, 6.7, 6.4, 7.3, 9.3, 7.4, 4.2, 5.2, 5.4, 5.4, 6.9, 4.7, 5.4, 5.4, 8.2, NA, 5.4, 7.6, 7.5, 4.7, 6.6, 5.0, 6.7, 6.4, 6.2, 7.9, NA, 8.0, 6.3, 6.5, 5.2, 6.8, 5.1, 5.6, 4.6, 6.8, 7.8, 6.1, 7.9, 5.6, 6.6, 5.8, 7.5, 7.2, 7.3, 5.3, 5.8, 4.8, 5.0, 7.4, 5.4, 4.9, 6.1, 7.1, 5.3, 5.4, 5.8, 5.4, 4.2, 8.4, 8.0, 9.8, 4.5, 5.1, 6.2, 8.6, 5.4, 5.5, 9.1, NA, 5.0, 5.4, 5.8, 6.4, 8.8, 5.0, 4.7, 5.1, 8.3, 4.6, 5.3, 8.8, 6.0, 6.6, 7.7, 4.5, 4.6, 5.9, 7.3, 8.1, 7.2, 6.4, 6.7, 4.8, 7.7, 5.8, 5.1, NA, 5.4, 8.7, 5.4, 6.3, 8.9, 7.6, 6.0, 5.1, 4.3, 7.9, 5.4, 7.5, 5.4, 5.0, 7.9, 7.6, 5.5, 7.1, 6.1, 6.0, 7.2, 9.1, 7.4, 4.2, 8.9, 4.4, 7.1, 7.0, 7.7, 6.1, 4.9, 9.3, 4.8, 8.1, 4.4, 7.5, NA, 5.3, 4.9, 9.0, 5.2, 5.2, 5.4, 5.9, 6.4, 7.2, 7.5, 4.3, 5.8, 7.9, 5.3, 6.1, 6.1, 4.3, 6.0, 7.7, 4.8, 7.6, 5.4, 4.9, 9.7, 6.4, 4.8, 6.4, 5.8, 4.7, 7.3, 5.2, 6.8, 6.6, 8.4, NA, 8.7, 8.9, 6.7, 7.6, 5.7, 7.4, 7.6, 7.5, 9.0, 7.9

1. The first raw moment of the data in **rubiktimena** is

2. The difference between third and second raw moments of the data in **rubiktimena** is

3. The second central moment of the data in **rubiktimena** is

4. The difference between the third and first central moments of the data in **rubiktimena** is

5. The fourth absolute moment of the data in **rubiktimena** is

6. The difference between third and second absolute moments of the data in **rubiktimena** is

7. The frequency distribution of the data in **rubiktimena** is

8. The coefficient of skewness (γ1) moment of the data in **rubiktimena** is

9. The frequency distribution of the data in **rubiktimena** is

10. The coefficient of kurtosis (γ2) moment of the data in **rubiktimena** is