**THE BIGGEST LOSER Handout**

Six teachers participated in a Biggest Loser contest at their school. Every other week for 10 weeks, the “contestants” recorded their weights. They then met to decide who had won the contest but couldn’t agree on a measure to use for their weight loss progress. They also could not agree about whether they should look at the progress on a weekly basis or look at the total result over the 10-week period.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Goal weight | Initial weight | After 2 weeks | After 4 weeks | After 6 weeks | After 8 weeks | After 10 weeks |
| **Mr. Alvarez** | 150.0 | 168.9 | 165.3 | 161.6 | 158.7 | 154.7 | 150.7 |
| **Mrs. Carlucci** | 130.0 | 142.3 | 139.8 | 137.5 | 134.4 | 132.5 | 130.6 |
| **Mr. Espinoza** | 140.0 | 156.1 | 153.0 | 150.3 | 147.1 | 145.1 | 142.0 |
| **Ms. Fayed** | 145.0 | 163.2 | 159.7 | 156.4 | 153.1 | 151.0 | 146.6 |
| **Mr. Gaffoor** | 135.0 | 148.8 | 145.3 | 143.1 | 139.1 | 135.1 | 131.1 |
| **Mrs. Sharma** | 125.0 | 134.7 | 132.4 | 129.8 | 128.1 | 125.1 | 122.1 |

Using the data in the chart above, work with a partner to determine who would win using each of the six methods of measuring progress listed below. Be sure to write the formula you will be using for each method, and that the formula matches the description given for each method.

# METHOD 1: Weekly pounds lost

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | After 2 weeks | After 4 weeks | After 6 weeks | After 8 weeks | After 10 weeks |
| **Mr. Alvarez** |  |  |  |  |  |
| **Mrs. Carlucci** |  |  |  |  |  |
| **Mr. Espinoza** |  |  |  |  |  |
| **Ms. Fayed** |  |  |  |  |  |
| **Mr. Gaffoor** |  |  |  |  |  |
| **Mrs. Sharma** |  |  |  |  |  |
| **Eliminated:** |  |  |  |  |  |

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Who would win the contest if weight loss is measured using this method?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# METHOD 2: Weekly Percent of Body Weight Lost

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **After 2 weeks** | **After 4 week** | **After 6 weeks** | **After 8 weeks** | **After 10 weeks** |
| Mr. Alvarez |  |  |  |  |  |
| Mrs. Carlucci |  |  |  |  |  |
| Mr. Espinoza |  |  |  |  |  |
| Ms. Fayed |  |  |  |  |  |
| Mr. Gaffoor |  |  |  |  |  |
| Mrs. Sharma |  |  |  |  |  |
| Eliminated: |  |  |  |  |  |

Who would win the contest if weight loss is measured using this method?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# METHOD 3: Weekly Percent of Goal Obtained

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **After 2 weeks** | **After 4 week** | **After 6 weeks** | **After 8 weeks** | **After 10 weeks** |
| Mr. Alvarez |  |  |  |  |  |
| Mrs. Carlucci |  |  |  |  |  |
| Mr. Espinoza |  |  |  |  |  |
| Ms. Fayed |  |  |  |  |  |
| Mr. Gaffoor |  |  |  |  |  |
| Mrs. Sharma |  |  |  |  |  |
| Eliminated: |  |  |  |  |  |

Who would win the contest if weight loss is measured using this method?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# METHOD 4:

# Total Pounds Lost in 10 Weeks

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Name** | **After 10 weeks** |
| Mr. Alvarez |   |
| Mrs. Carlucci |   |
| Mr. Espinoza |   |
| Ms. Fayed |   |
| Mr. Gaffoor |   |
| Mrs. Sharma |   |
| Winner: |   |

# METHOD 5:

# Percent Body Weight Lost in 10 Weeks

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Name** | **After 10 weeks** |
| Mr. Alvarez |   |
| Mrs. Carlucci |   |
| Mr. Espinoza |   |
| Ms. Fayed |   |
| Mr. Gaffoor |   |
| Mrs. Sharma |   |
| Winner: |   |

# METHOD 6:

# Percent Goal Obtained in 10 Weeks

Formula:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Name** | **After 10 weeks** |
| Mr. Alvarez |   |
| Mrs. Carlucci |   |
| Mr. Espinoza |   |
| Ms. Fayed |   |
| Mr. Gaffoor |   |
| Mrs. Sharma |   |
| Winner: |   |

Did the different methods have the same results? Explain why or why not.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_