Mean for Grouped Data Solutions

TI-84 Plus CE and Mean

Compute the mean for the following Grouped Data. Approximate your answer to the nearest tenths.

1. **How old are you?**
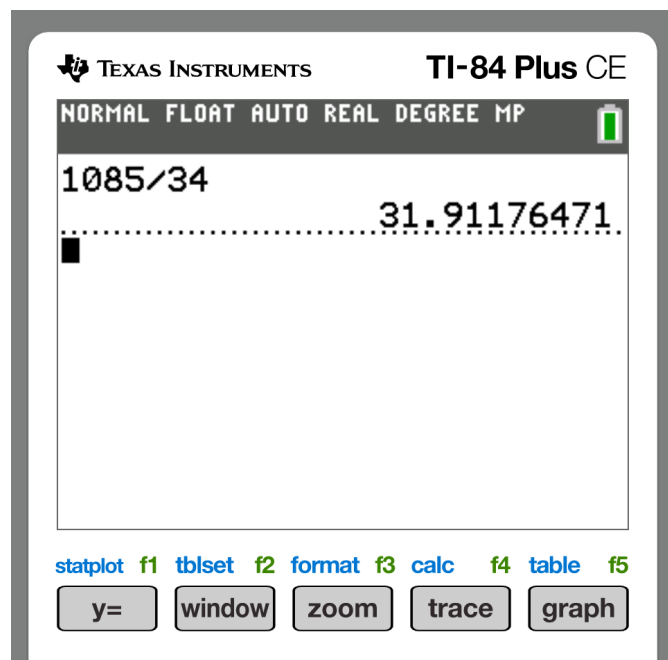
The following sample data table illustrates the ages (years) of students in a Statistics class.

Years	f	m	fm
23 to 27	8	25	200
28 to 32	10	30	300
33 to 37	12	35	420
38 to 42	3	40	120
43 to 47	1	45	45

Total   **34**   **1085**

TEXAS INSTRUMENTS   TI-84 Plus CE

NORMAL FLOAT AUTO REAL DEGREE MP

1085/34
                        31.91176471

statplot f1   tblset f2   format f3   calc   f4   table   f5

| y= | window | zoom | trace | graph |

$\approx$ **31.9 years**
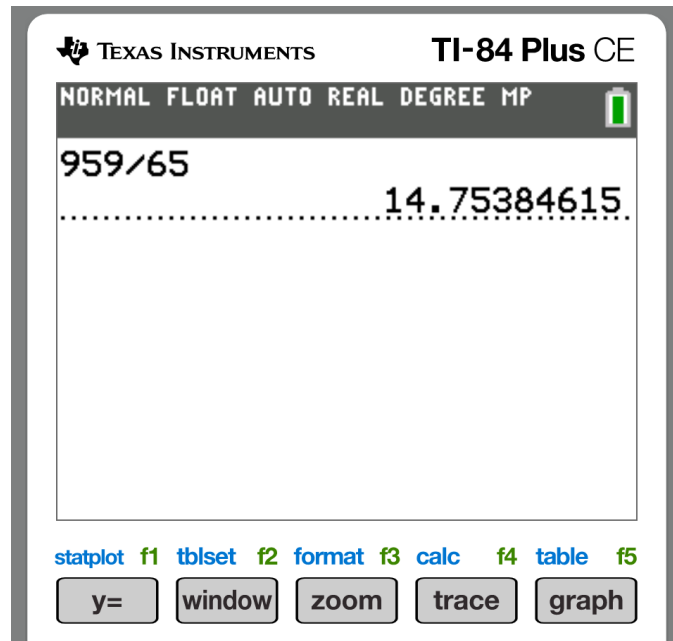
2. How many semesters did it take for you to transfer?

The following sample data illustrates the number of semesters it took for students to transfer from a Community College.

Semesters	f	m	fm
6 to 8	4	7	28
9 to 11	6	10	60
12 to 14	18	13	234
15 to 17	22	16	352
18 to 20	15	19	285

Total   **65**   **959**

TEXAS INSTRUMENTS   TI-84 Plus CE

NORMAL FLOAT AUTO REAL DEGREE MP

959/65
                    14.75384615

statplot f1   tblset f2   format f3   calc   f4   table   f5

y=   window   zoom   trace   graph

$\approx$ **14.8 semesters**

3. Lifespan of an iPhone?

The following data illustrates the lifespan (months) of an iPhone for various customers at Best Buy.

Months	f	m	fm
12 to 19	3	15.5	46.5
20 to 27	15	23.5	352.5
28 to 35	12	31.5	378
36 to 43	10	39.5	395
44 to 51	5	47.5	237.5

Total   **45**   **1409.5**

TEXAS INSTRUMENTS   TI-84 Plus CE

NORMAL FLOAT AUTO REAL DEGREE MP

1409.5/45

31.32222222

statplot f1   tblset f2   format f3   calc   f4   table   f5

y=   window   zoom   trace   graph

$\approx$ **31.3 months**

4. How much sleep do you get during the weeknight?

The following data illustrates the amount of time (hours) students sleep during a weeknight.

Hours	f	m	fm
0 to 3	9	1.5	13.5
4 to 7	11	5.5	60.5
8 to 11	10	9.5	95
12 to 15	13	13.5	175.5
Total	**43**		**344.5**

TEXAS INSTRUMENTS   TI-84 Plus CE

NORMAL FLOAT AUTO REAL DEGREE MP

344.5/43
                           8.011627907

statplot f1   tblset f2   format f3   calc   f4   table   f5

y=   window   zoom   trace   graph
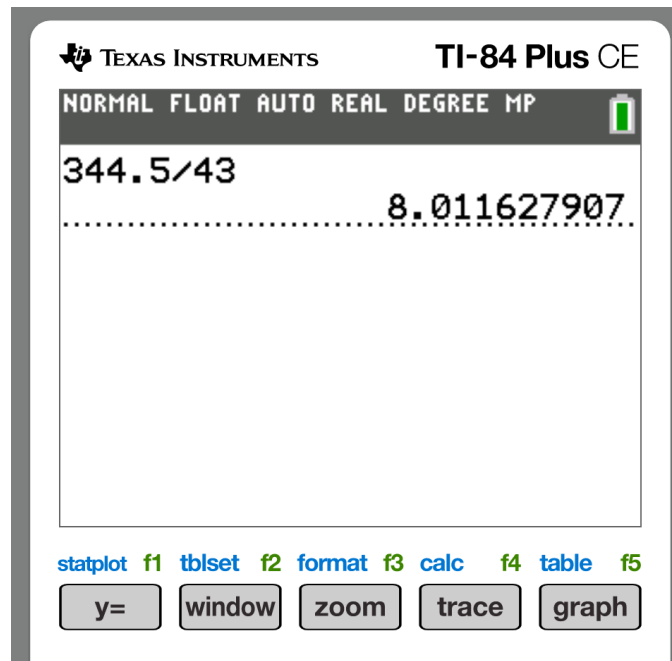
≈ **8.0 hours**

5. **How fast do you drive on the freeway?**

The following sample data illustrates the speed (M.P.H) of cars on the freeway.

MPH	f	m	fm
65 to 69	5	67	335
70 to 74	8	72	576
75 to 79	6	77	462
80 to 84	2	82	164
85 to 89	1	87	87

Total		22	1624

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TEXAS INSTRUMENTS          TI-84 Plus CE
NORMAL FLOAT AUTO REAL DEGREE MP

1624/22
                            73.81818182
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statplot f1 tblset f2 format f3 calc f4 table f5

y=   window   zoom   trace   graph
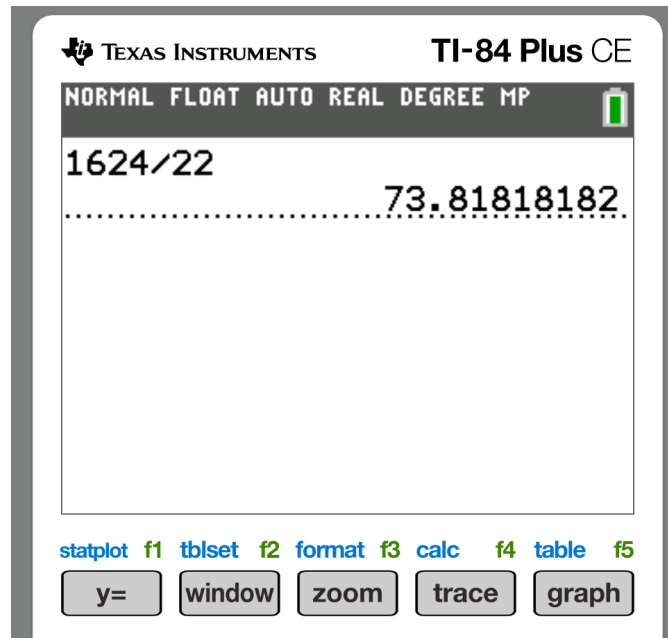
$\approx$ **73.8 mph**

Answers

1. 31.9 years
2. 14.8 semesters
3. 31.3 months
4. 8.0 hours
5. 73.8 MPH