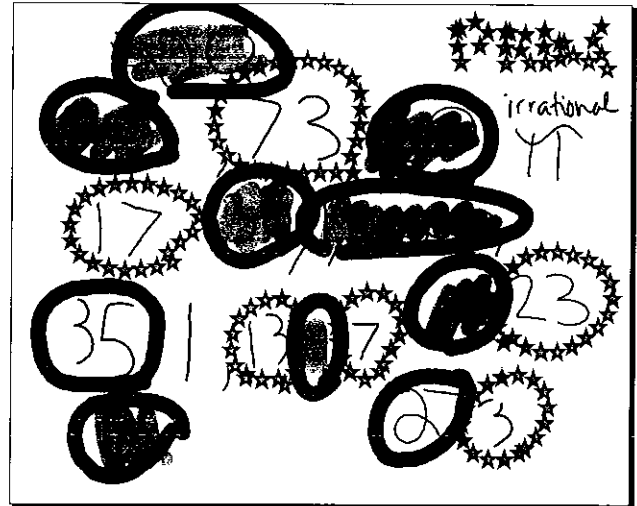


Warm Ups: TXT page 14 #23
Find Mean, Median, Mode and Range
for the data given.

23. 23, 27, 28, 29, 19, 32, 25, 26, 22



Finding an Average when a piece of data is missing.

Three Step Process:
1. ~~Is~~ ^(Items) ~~the~~ ^{Day 3}
2nd Multiply (# of tests * the average you want) ^{p.5 notetaking pkt.}
• Subtract they want to get

5 tests Total
1. Jacob's scores on 4 tests were 83, 86, 80, and 81. He has one more test to take, and he wants to earn an 85 average in the class. What score must he get to have an 85 average?

$$\frac{\text{1st: } \text{[blacked out]} + X}{5} = 85$$

$$\frac{330 + X}{5} = 85$$

$$\frac{330 + X}{5} = 85$$

$$- \frac{330}{5}$$

$$X = 95$$

2. Money earned weekly for five weeks include: \$18, \$23, \$17, \$10, and \$16. Want to average \$20 per week. What do you need to earn during the sixth week to maintain an average of \$20 per week?

$$\frac{18 + 23 + 17 + 10 + 16 + X}{6} = 20$$

$$\frac{84 + X}{6} = 20$$

$$- \frac{84}{6}$$

$$X = \$36$$

3. Mrs. Mesh lost a test in her class of 25 students. The mean score for the class was 80 and the sum of the other scores was 1980. What was the grade on the missing paper?

1st 24 tests

Step 1 is already done

$$\frac{1980 + X}{25} = 80$$

$$\begin{array}{r} 1980 + X = 2075 \\ -1980 \quad -1980 \\ \hline X = 95 \end{array}$$

4. Mean = 12 $\frac{9, 12, 15, 21, 4, X}{6} = 12$

5. Mean = 62 30, 90, 60, 40, ____

④ $\frac{60 + X}{2} = 72$

$$\begin{array}{r} 60 + X = 144 \\ -60 \quad -60 \\ \hline X = 84 \end{array}$$

6. Mean = 68.8 88, 56, 77, 32, ____

7. Mean = 15.75 13.8, 14.2, 19.6, ____

⑥ $\frac{88 + 56 + 77 + 32 + X}{5} = 68.8$

$$\begin{array}{r} 253 + X = 344 \\ -253 \quad -253 \\ \hline X = 91 \end{array}$$

⑦ $\frac{13.8 + 14.2 + 19.6 + X}{4} = 15.75$

$$\begin{array}{r} 47.6 + X = 63 \\ -47.6 \quad -47.6 \\ \hline X = 15.4 \end{array}$$

8. Mean = 69.25% 97%, 32%, 84%, ____

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1. John planned to save an average of \$40.00 a month for five months to buy a bicycle. He has already saved the amounts shown below.

Month	Amount
1	\$53.00
2	\$55.00
3	\$32.00
4	\$25.00
5	?

05/2000

37.

How much does John need to save in the fifth month to reach his goal?

- A. \$30.00
- B. \$33.00
- C. \$35.00
- D. \$45.00

2. For one week Darren sold tickets for the annual school picnic. He sold 45 tickets on Monday, 50 tickets on Tuesday, 35 tickets on Wednesday, and 40 tickets on Thursday. By the end of Friday, Darren had sold an average of 39 tickets daily. How many tickets had Darren sold on Friday?

- A. 25
- B. 34
- C. 39
- D. 52

05/2000

40.

Sgb = Subscales
 ME - Measurement
 AR - Arithmetic
 GE - Geometry
 DA - Data Analysis
 AL - Algebra

Out = Math Outcomes
 01 - 16

LU = Level of Understanding
 K - Knowledge
 C - Conceptual Understanding
 A - Application and Problem Solving

MM/YYYY
 Date of testing

SE-L Ohio Ninth Grade Mathematics Proficiency Workbook

3.

Attendance at the first five Science Club meetings is shown below.

Meeting	Attendance
1	20
2	15
3	16
4	14
5	15

03/2000

2.

What was the average attendance at these meetings?

- A. 13
- B. 14
- C. 15
- D. 16

4.

Ken's family drove an average of 300 miles per day during the first three days of their vacation. They drove 350 miles on the first day and 280 miles on the second day. How many miles did they drive on the third day?

- A. 210
- B. 270
- C. 330
- D. 380

30. Sub Out LU
DA 14 A

03/2000

30.

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5. Mark has lost one of his four completed math tests. The scores on the tests he still has are 70, 75, and 90. If his average for all four tests is 80, what is his score on the test he lost?

- A. 75
- B. 78
- C. 81
- D. 85

07/1999

22

6. Charley has a summer job working Mondays through Fridays. Each week he must work an average of 5 hours a day. Below are the number of hours he has already worked during the week.

Monday	6
Tuesday	2
Wednesday	5
Thursday	6

How many hours does Charley need to work on Friday to have an average of 5 hours a day for the week?

- A. 1 hour
- B. 4 hours
- C. 5 hours
- D. 6 hours

07/1999

37

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7. Kevin recorded the daily high temperatures in degrees Fahrenheit, for Tuesday through Friday on the chart below.

10/1999

4.

Day	Temperature
Tuesday	32°
Wednesday	28°
Thursday	25°
Friday	25°

At the end of the week, he heard a report that the average high temperature for Monday through Friday was 30° F. What was the high temperature for Monday?

- A. 22° F
- B. 30° F
- C. 35° F
- D. 40° F

8.

The Spanish Club decided to prepare an authentic Mexican meal for lunch. Each student was responsible for preparing a different Mexican dish. On the average, each boy spent \$6 on his dish, while each girl spent \$3 on her dish. There were 10 boys and 20 girls in the club. What was the average cost per dish?

10/1999

18.

- A. \$3.00
- B. \$4.00
- C. \$4.50
- D. \$5.00

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9. In Mrs. Johnson's class, a student's final grade depends on the student's average score for five tests. If that average is 90 or higher, the student earns an A. Esther's average score for the first four tests is 95. What is the lowest score she can get on the fifth test and still receive an A in the class?

- A. 60
- B. 70
- C. 80
- D. 90

03/1999

18

10. The number of people who attended each performance of the school play was 45, 52, 60, 75, and 83. What was the average number of people attending a performance?

- A. 60
- B. 63
- C. 310
- D. 315

03/1999

10.

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11.

A teacher has given her class 4 out of 5 unit tests. Julian has earned an average score of 80 on the four tests. What score does Julian need to earn on the fifth test to bring his average test score to 82?

- A. 75
- B. 80
- C. 85
- D. 90

05/1999

19.

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