

30. To increase the mean of 4 numbers by 2, by how much would the sum of the 4 numbers have to increase?

F. 2

G. 4

H. 6

J. 8

K. 16

7. To determine a student's overall test score for the semester, Ms. Lopez throws out the lowest test score and takes the average of the remaining test scores. Victor earned the following test scores in Ms. Lopez's class this semester: 62, 78, 83, 84, and 93. What overall test score did Victor earn in Ms. Lopez's class this semester?
- A. 67.6
 - B. 80.0
 - C. 83.0
 - D. 83.5
 - E. 84.5

41. What is the median of the following 7 scores?

42, 67, 33, 79, 33, 89, 21

- A.** 42
- B.** 52
- C.** 54.5
- D.** 56
- E.** 79

2. The monthly fees for single rooms at 5 colleges are \$370, \$310, \$380, \$340, and \$310, respectively. What is the mean of these monthly fees?

F. \$310

G. \$340

H. \$342

J. \$350

K. \$380

47. Tom has taken 5 of the 8 equally weighted tests in his U.S. History class this semester, and he has an average score of exactly 78.0 points. How many points does he need to earn on the 6th test to bring his average score up to exactly 80.0 points?
- A. 90
 - B. 88
 - C. 82
 - D. 80
 - E. 79

- 33.** The table below shows the total number of goals scored in each of 43 soccer matches in a regional tournament. What is the average number of goals scored per match, to the nearest 0.1 goal?

Total number of goals in a match	Number of matches with this total
0	4
1	10
2	5
3	9
4	7
5	5
6	1
7	2

- A.** 1.0
- B.** 2.8
- C.** 3.0
- D.** 6.1
- E.** 17.1

6. Anton went to Mexico during summer vacation with his Spanish class. He recorded the number of pesos he spent each day in a table, as shown below. What was the mean number of pesos he spent per day?

July	1	2	3	4	5
Pesos spent	250	100	150	100	400

- F. 100
- G. 150
- H. 200
- J. 220
- K. 300

55. A baseball team played its first 20 games and won 12 of them. Then, the team went on a losing streak and lost its next 4 games. How many consecutive additional victories does the baseball team need in order to bring its winning percentage back to at least what it was just before this 4-game losing streak?

- A. 2
- B. 4
- C. 6
- D. 8
- E. 12

$\frac{\text{games won}}{\text{games played}} = \text{Winning Percentage}$

AVERAGES

$x = \text{ADDITIONAL NUMBER OF WINS}$

$$\frac{12 + x}{24 + x} \geq 60\%$$

SOLVE FOR $x \geq 6$

24 because they lost 4 games

See Review

*

C

1. For each of 3 years, the table below gives the number of games a football team played, the number of running plays they ran, and the total number of yards the team gained on running plays.

Year	Games	Running plays	Total yards gained on running plays
1997	11	397	1,028
1998	11	394	1,417
1999	9	378	1,920

To the nearest tenth of a yard, what is the average number of yards gained per running play in 1998 ?

- A. 2.6
- B. 2.7
- C. 3.6
- D. 4.9
- E. 5.1

41. In a math course, a student scored 100 on one test, 97 on another test, and 88 on each of the other tests. The student's test average for the course, where each test is weighted equally, is exactly 91. What is the *total number* of math tests that the student has taken in the course?

- C
- A. 3
 - B. 5
 - C. 7
 - D. 15
 - E. Cannot be determined from the given information

$n = \text{TOTAL NUMBER}$
 of Test Taken

DO YOUR FIGURING HERE.

AVERAGES

$$91 = \frac{100 + 97 + 88(n-2)}{n}$$

$$91n = 197 + 88n - 176$$

$$3n = 21 \quad n = 7$$

You can try each choice quickly

37. What is the difference between the mean and the median of the set $\{3, 8, 10, 15\}$?

- A.** 0
- B.** 1
- C.** 4
- D.** 9
- E.** 12