



1.2 Averaging

READ

The most common type of average is called the *mean*. Usually when someone (who's not your math teacher) asks you to find the average of something, it is the *mean* that they want. To find the mean, just sum (add) all the data, then divide the total by the number of items in the data set. This type of average is used daily by many people. Teachers and students use it to average grades. Meteorologists use it to average normal high and low temperatures for a certain date. Sports statisticians use it to calculate batting averages and many other things.

EXAMPLE

- William has had three tests so far in his English class. His grades are 80%, 75%, and 90%. What is his average test grade?

Solution:

- Find the sum of the data: $80 + 75 + 90 = 245$
- Divide the sum (245) by the number of items in the data set (3): $245 \div 3 \approx 82\%$

William's average (mean) test grade in English (so far) is about 82%

PRACTICE

- The families on Carvel Street were cleaning out their basements and garages to prepare for their annual garage sale. At 202 Carvel Street, they found seven old baseball gloves. At 208, they found two baseball gloves. At 214, they found four gloves, and at 221 they found two gloves. If these are the only houses on the street, what is the average number of old baseball gloves found at a house on Carvel Street?
- During a holiday gift exchange, the members of the winter play cast set a limit of \$10 per gift. The actual prices of each gift purchased were: \$8.50, \$10.29, \$4.45, \$12.79, \$6.99, \$9.29, \$5.97, and \$8.33. What was the average price of the gifts?
- During weekend baby sitting jobs, each sitter charged a different hourly rate. Rachel charged \$4.00, Juanita charged \$3.50, Michael charged \$4.25, Rosa charged \$5.00, and Smith charged \$3.00.
 - What was the average hourly rate charged among these baby sitters?
 - If they each worked a total of eight hours, what was their average pay for the weekend?
- The boys on the ninth grade basketball team at Fillmore High School scored 22 points, 12 points, 8 points, 4 points, 4 points, 3 points, 2 points, 2 points, and 1 point in Thursday's game. What was the average number of points scored by each player in the game?
- Jerry and his friends were eating pizza together on a Friday night. Jerry ate a whole pizza (12 slices) by himself! Pat ate three slices, Jack ate seven slices, Don and Dave ate four slices each, and Teri ate just two slices. What was the average number of slices of pizza eaten by one of these friends that night?