WEIGHTED AVERAGE:

$$\frac{\text{The sum of the products of each test and its weight}}{\text{The sum of the weights}}$$

Category	Weight		Student's Scores	
Homework	25		Homework	88
Quiz	30		Quiz	71
Test	10		Test	97
Final Exam	35		Final Exam	90

Example

- Grades are often computed using a weighted average. Suppose that homework counts 10%, quizzes 20%, and tests 70%.

- If Pat has a homework grade of 92, a quiz grade of 68, and a test grade of 81, then Pat's average would be?

Example: Alex usually works 7 days a week, but sometimes just 1, 2, or 5 days.

The data:

- 2 weeks Alex worked 1 day each week
- 14 weeks Alex worked 2 days each week
- 8 weeks Alex worked 5 days each week
- 32 weeks Alex worked 7 days each week

What is the mean number of days Alex works per week?

example 2

In Courtney's math class her grades are calculated from assignments, tests and a final exam.

assignments are worth 30%, tests are worth 20% and the final exam is worth 50%.

If Courtney has an assignment grade of 85, test grade of 76 and a final exam of 66 what is her overall average?

example 3

Meredith has a 92 quiz average, a 75 homework average and an 82 test average going into her trimester exam for precalc. What does Meredith need to get on her trimester exam to get at least an 85 on her report card?

An international tennis star got her first serve in 80% of the time for the first 10 matches of the season.

In the remaining 5 matches, she only got her first serve in 50% of the time.

What percent of her serves were in for the whole season?