

# [Weighted Averages Worksheet]

1. Consider a course where quizzes are 15% of the grade, exam 1 is 20%, exam 2 is 20%, homework is 20%, and the final is 25%. Suppose student X receives the following scores.

	Q1	Q2	Q3	Q4	Q5	HW1	HW2	HW3	HW4	EX1	EX2	FINAL
X's score	5	6	8	8	9	10	10	0	8	41	48	89
Possible points	9	9	9	9	9	10	10	10	10	53	56	92

- a. Compute student X's grade.
  - b. Compute student X's grade if we drop the homework assignment he/she missed.
2. Assume you are in a class where quizzes are 20% of your grade, homework is 20%, exam 1 is 15%, exam 2 is 15%, and the final is 30%. Suppose it's week 5 and you just found out that you scored a 58/63 on the first exam. You also know that you received a 6/9, 8/10, and 9/9 on the first three quizzes as well as a 9/11, 10/10, and 4.5/7 on the first three homework assignments. What is your current grade in the course?
3. Mary and John are competing in a food competition. Their dish is graded on the following categories each worth 18 points: taste, presentation, and addressing the challenge. Taste is worth 60% of their final score; presentation is 25%, and addressing the challenge is 15%. Whoever has the largest final score wins \$50,000.
- a. What is the largest score possible?
  - b. Suppose Mary received 15 points for taste, 9 points for presentation, and 14 points for addressing the challenge. Further suppose John received 18 points for taste, 7 points for presentation, and 13 points for addressing the challenge. Who won?
4. Pam and Jim are competing in a different food competition. In this competition they are asked to make 3 dishes. The competition is comprised of cooking three meals; each meal must consist of the challenge ingredients given to them at the beginning of each round. The first and second dishes are worth 30% of their final score, and the last dish is worth 40%.

The first two dishes are graded on the following categories: taste, presentation, and creativity. For the first two dishes, taste is 60% of their score, presentation is 25% of their score, and creativity is 15% - each category is worth a maximum of 20 points.

The third dish is graded on taste and presentation alone, where taste is 70% of their score for round 3, and presentation is 30% - each with a 20 point score.

Whoever has the largest score wins \$100,000. The table below outlines Jim and Pam's score for each round, who won?

	Jim			Pam		
	Round 1	Round 2	Round 3	Round 1	Round 2	Round 3
Taste	17	18	15	17	16	19
Presentation	18	18	18	15	16	19
creativity	19	16	-	18	18	-