Computing Grades
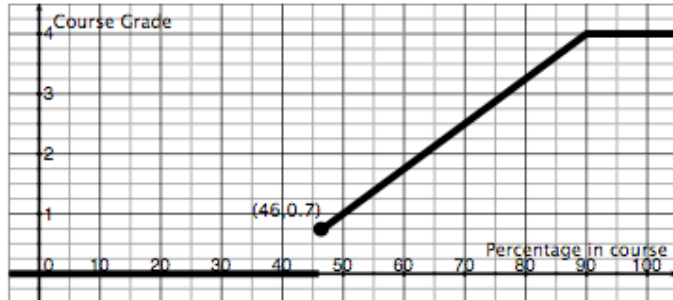
1. James T. Kirk goes to college and on the first day of precalculus class he is handed the following information on the syllabus:

   ## Grades:

   The following weights will be used to calculate your percentage in the course. The function graphed takes your percentage in the course and returns your grade on a 4. scale.

Mini-Quizzes (top score)	5%
WeBWork assignments	10%
Handwritten assignments	15%
Quizzes	15%
2 Midterms	30%
Final	25%

   In week 7 Kirk begins to get concerned about his grades. He logs onto Catalyst and finds the averages for each of the categories that were specified above:

category	James' ave	category	James' ave
Mini-Quizzes	95%	Quizzes	70%
WeBWork	0%	2 Midterms	100%
WrittenHW	0%		

   Assuming his performance in each category will not change in the remaining weeks (i.e. he will continue not to do his homework), what grade must James get on his final to get a 2.5 in the class?

2. Uhura was in the same class as Kirk and started thinking about her class grade in week 5 before the second exam and computed the following averages:
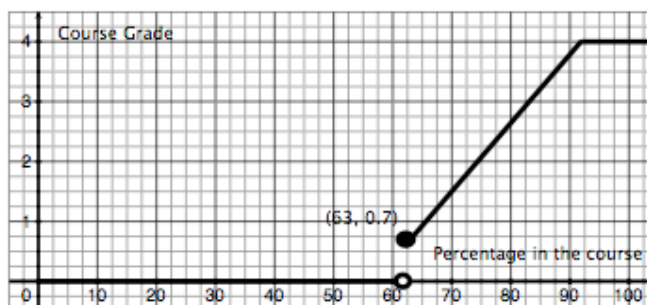
category	Uhura's ave	category	Uhura's ave
Mini-Quizzes	85%	Quizzes	80%
WeBWork	100%	2 Midterms	80%
WrittenHW	90%		

   Assuming her homework and quiz averages do not change much in the remaining weeks, what could she get on the second exam and on the final to make sure she gets a 4.0 in the class?

3. Clark Kent goes to college and on the first day of origami math class is handed the following information on the syllabus:

Grades: The following weights will be used to calculate your grade.

Journals	15%
Homework	15%
Quizzes	15%
Origami Project	10%
Papers	10%
Midterm	15%
Final	20%

The above grade assignment is based off the University of Washington, Tacoma's grading scale posted at http://www.tacoma.washington.edu/enrollmentservices/grading.cfm.

In week 7 Clark begins to get concerned about his grades (being a super hero is still new to him so he has missed a few assignments). He logs onto Catalyst and finds the averages for each of the categories remembering that the lowest quiz score is dropped and thus not included in the quiz average:

category	Clark's ave	category	Clark's ave
Journals	50%	Origami Project	90%
Homework	50%	Papers	80%
Quizzes	65%	Midterm	95%

Assuming his performance in each category will not change in the remaining weeks (i.e. he will continue to only complete half of his journal entries & miss half of the quizzes), what grade must Clark get on the final to get a 2.0 in the class?

4. Lois Lane was in the same class as Clark and started thinking about her class grade in week 5 before the she had gotten the scores for her papers or turned in her origami project, so she could only compute the following averages:

category	Lois' ave	category	Lois' ave
Journals	73%		
Homework	63%		
Quizzes	83%	Midterm	70%

Assuming her journal, homework, and quiz averages do not change much in the remaining weeks, what scores could Lois Lane get on her papers, project, and final to make sure she gets a 2.0 in the class?

If Lois changes her behavior and completes all of her journal entries from here on out, how much can she bring up her journal average?