

## Quiz 1

This is a two-stage quiz. During the first stage, use your knowledge & calculator to take this quiz. You have 15 min. In the second stage, you are now welcome to use your books, notes, and students in the class to retake the same quiz. You have 15 min. to write one solution (with everyone's name on it!!!) to be turned in for the group.

Show your work as you would for a *colleague*. Partial credit requires reasonable support.

1. [4] When a teacher counted their students in groups of three, there were two students left over. When they counted in groups of five, there was one student left over. Given that the class size is between 15 and 30 students, how many students are in the class?
2. Suppose you own a square piece of land. You trade your land for a rectangular lot. The length of your new lot is 2 meters longer than the original lot and the width is 2 meters shorter than the original lot. Does your new lot have as much land as the old?
  - (a) [2] If your first piece of land is 30 meters by 30 meters, what are the dimensions of the new lot?
  - (b) [4] What kind of strategy (eg. drawing, table, guessing & checking, models, work backwards, etc) might you use to try to solve this problem generally? Briefly start so the strategy can be easily seen. (Note, the *answer* does not need to be found, just the set up for the strategy work!)