

## Quiz 6

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. [3] Determine if the sentence makes sense. If it makes sense, provide some justification, if not, create a sentence with the numbers given that does make sense.

1.  $13|403$ .

2. The number 2 is a multiple of 10.

2. Janice and Bob are decorating sidewalk squares along their street. Janice chooses to decorate every fourth square while Bob decorates every sixth.

1. [1] Sketch the first 15 squares of the sidewalk and indicate if Janice and/or Bob decorates the square.

2. [2] How often do Janice and Bob collaborate to decorate the same square?

3. [2] Find the  $\text{GCD}(4,6)$  and  $\text{LCM}(4,6)$

3. [2] Is the following statement always true, sometimes true, or never true? Briefly justify.  
If  $a|b$  and  $a \nmid c$ , then  $a \nmid (b - c)$ .