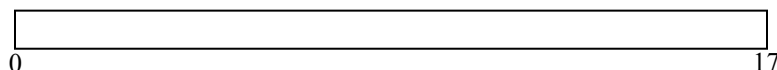


# Puzzler of the Month

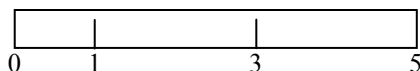
*From the Monroe Community College Math Department*

**For MCC Students, Faculty, and Staff**

Add four distinct (vertical) marks to the following ruler of length 17 so that no smaller length can be measured more than once using this ruler. Your ruler will not be able to measure all lengths up to 17 (it will be able to measure 15 distinct nonzero lengths), but an additional requirement will be that you must construct the ruler so that it can be used to measure lengths 5, 10, and 15 as well as twelve others.



For example, consider the following ruler of length 5 with two marks.



While a length of 4 can be measured in only one way (1 to 5), we can measure a length of 2 in two ways (1 to 3 and 3 to 5). Note: lengths 1, 3, and 5 can also be measured in exactly one way.

**Solve this Puzzler and you could win a prize\*!!!**

**To submit a solution:**

1. Neatly write up your solution, clearly identifying the answer and clearly showing all work when applicable.
2. Along with the solution include your name and phone number (so we can contact you if you win the prize).
3. On the Brighton Campus, solutions may be submitted in the Puzzler of the Month drop box in the Math Learning Center (11-204). On the Damon City Campus, solutions may be submitted in the Puzzler of the Month drop box in the Integrated Learning Center.

You may also submit solutions by emailing Steve Kilner at [skilner@monroecc.edu](mailto:skilner@monroecc.edu) (please indicate “puzzler solution” as the subject).

Faculty and Staff may use inter-departmental mail as well.

**For official rules and more details go to the Math Learning Center 11-204, the DCC Integrated Learning Center or visit our website: [web.monroecc.edu/MathPuzzler](http://web.monroecc.edu/MathPuzzler) .**

*\*Only students are eligible for the monthly prize.*

***\*\*\*Solutions must be submitted by September 30\*\*\****