

# Puzzler of the Month

April 2018

*From the Monroe Community College Mathematics Department*

## **Solve this puzzle and you could win a prize!\***

To reward his son for good behavior, Isaac gave his son quarters for  $N$  consecutive days.

On the first day, he gave him 1 quarter and then  $1/7^{\text{th}}$  of the quarters that remained. On the second day, he gave him 2 quarters and then  $1/7^{\text{th}}$  of the quarters that remained. On the third day, he gave him 3 quarters and then  $1/7^{\text{th}}$  of the quarters that remained. This continued until the  $N^{\text{th}}$  day, when he gave his son  $N$  quarters and ran out of quarters.

How many total quarters did Isaac give his son and over how many days did this occur?

***Solutions must be submitted by April 30***

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### **To submit a solution:**

1. Neatly write up your solution, clearly identifying the answer and clearly showing all work when requested.
2. Include your name and email (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). Solutions at the Downtown Campus can be submitted to Michael Eames (Mathematics), office 574-M.

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.

For official rules and more details go to the Math Learning Center 11-204 or visit our website: [www.monroecc.edu/go/mathpuzzler](http://www.monroecc.edu/go/mathpuzzler).

