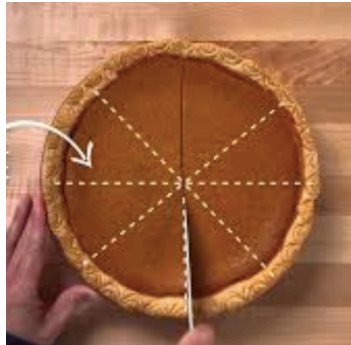


## Mathletes Problem of the Week #12

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### A Slice of Pie



March 14<sup>th</sup> is pi day! To celebrate the number  $\pi$ , this week's Mathlete's Problem of the Week is about the food pie. When you cut pie (or a circle) from one end to the other, you make 2 pieces. When you cut a pie from one end to the other two times, you can make 4 pieces.

- What is the most number of pieces you can make with 3 cuts? (Note, your cuts do NOT all need to go through the center of the pie!)
- What is the largest number of pieces you can make with 4 cuts?
- Is there a pattern here? Can you predict how many pieces you can get from 5 cuts, 6 cuts, or more?

**Solutions & Explanations:** (Try one or try them all. Show your solutions and explain your thinking here and on the back!)

Name \_\_\_\_\_

Class \_\_\_\_\_

**(First and last name, please!)**

**Solutions due: March 14<sup>th</sup> ( $\pi$  day!)**