## VCTM 2017 Math Beauty Contest

## For each problem, be sure to include a paragraph that fully explains your thinking

K-2:
Please create a pattern that is either a growing or repeating pattern or both. Please be sure to tell what your thinking was by writing a paragraph explaining your thoughts about your creation of the pattern.

Students who are not able to write the paragraph may dictate it to an adult who can write exactly what the student says.

## 3-5:

John played on his school's basketball team. He practiced for 5 days. Each day he would throw 20 shots at the basket. On the first day he got 4 of his shots in the basket. Each day he got 3 more shots in the basket than he did the day before. How many total shots did he get in the basket for the 5 days?

6-8:
The Wilson children went to the grocery store with their mom and dad. They saw 4 wheel cars, 2 wheel motorcycles and 18 wheel big trucks in the parking lot. They asked their parents if they could count the cars, motorcycles and 18 wheel big trucks. There were 3 of the 18 wheel big trucks. There were 4 times as many 2 wheel motorcycles as 18 wheel big trucks and 20 times as many 4 wheel cars as 18 wheel big trucks. They added up all the wheels they saw on these cars, motorcycles and trucks. How many wheels were there when they added them all up?

## 9 - Algebra I:

Susan and her family went on a vacation. They were gone for 5 days. They drove a total of 950 miles. On the second day they drove $1 / 2$ times as many miles as they did on the first day. On the $3^{\text {rd }}$ day they drove 1.25 as many miles as they did on the first day. On the $4^{\text {th }}$ day they drove the same number of miles that they drove on the $3^{\text {rd }}$ day. On the $5^{\text {th }}$ day they drove $1 / 2$ as many miles as they did on the $1^{\text {st }}$ and 2 nd day combined. How many miles did they drive each day?


#### Abstract

Above Algebra I: Susan and her family went on a vacation. They were gone for 5 days. They drove a total of 950 miles. On the second day they drove $1 / 2$ times as many miles as they did on the first day. On the $3^{\text {rd }}$ day they drove 1.25 as many miles as they did on the first day. On the $4^{\text {th }}$ day they drove the same number of miles that they drove on the $3^{\text {rd }}$ day. On the $5^{\text {th }}$ day they drove $1 / 2$ as many miles as they did on the $1^{\text {st }}$ and $2^{\text {nd }}$ day combined. How many miles did they drive each day?


