National Banana Split Day

6th -8th Grade:

1.	The cafeteria is making every 6 th grade student a banana split to celebrate National Banana Split day! There are 112 6 th grade students at the school. Each banana split requires 3 scoops of ice cream. A 1-gallon container has 32 scoops of ice cream. How many gallons of ice cream is needed for all 6 th grade students to have a banana split? Justify your decision.
2.	Traditionally a banana split has 1 scoop of vanilla, 1 scoop of chocolate, and 1 scoop of strawberry ice cream. Using only those three flavors, how many different banana split combinations could be made if you allow students to select their 3 scoops rather than only using the traditional combination? Note: Order of the ice cream does not make it a unique combination so vanilla, chocolate, vanilla is the same as vanilla, vanilla, chocolate. Justify your answer.
3.	Wendy owns a small ice cream shop. It cost her a total of \$2.50 to make each banana split and she sells them for \$6.00 each. Wendy has profited \$392 just from selling banana splits. How many banana splits did she sell? Justify your answer.

