Math 4a. Homework 4.

1. Do the prime decomposition of the numbers: $66,28,128,555,1233$
2. Find GCF using prime decomposition:
a. $\operatorname{GCF}(75,135)$;
b. $\operatorname{GCF}(180,210)$;
c. $\operatorname{GCF}(117,195,312)$;
3. Find the LCM using the prime decomposition:
a. $\operatorname{LCM}(28,35)$;
b. $\operatorname{LCM}(16,56)$;
c. $\operatorname{LCM}(72,90,96)$;
4. A teacher divided 87 notebooks between the students in the class equally. How many students in the class and how many notebooks did each student get, if we know that there are more than 10 students in the class?
5. Mary wrote down a sequence of multiples of a certain number, starting with the smallest one. Twelfth number in this sequence is 60 . Find the first, sixth, and twentieth numbers.
6. Without calculating, establish whether the sum is divisible by a number:
a. $25+35+15+45$ by 5 ;
b. $14+21+63+49$ by 7
c. $18+36+55+90$ by 9 ;
7. How many vans are needed to take 55 students on a field trip if a van can take 12 students?
8. It is known that in January, there are four Fridays and four Mondays. Which day of the week is January 1st?
9. The Johnsons family traveled from Stony Brook to Chicago. They covered the distance between these cities of 846 miles in 3 days. On Friday and Saturday, they covered 620 miles, on Sunday 53 miles more than on Saturday. How many miles did they drive on each of those days?

