

MATH 4: ASSIGNMENT 3

SEPTEMBER 29, 2019

HOMEWORK

1. Compute, remainder possible:

(a)  $215 \div 7$

(b)  $995 \div 61$

(c)  $1234567 \div 123$

2. The remainder of  $1932 \div 17$  is 11, the remainder of  $261 \div 17$  is 6. Is  $1932 + 261$  divisible by 17? Can you tell without calculating and dividing?
3. The 4-digit number A7A9 (where A stands for some digit) is divisible by 9. What is A?
4. In some remote village many years ago villagers tamed dragons. They even started to breed them. Somehow on a weekend day or a holiday the villages had 2 eggs less hatching then on a week day. How many dragons have been hatched on a week day and on a weekend day if for one full week they added 80 dragons to their dragon flock?
5. Find the LCM(Least Common Multiple) and GCF (Greatest Common Divisor) of the following numbers:
- a. 9 and 12;
  - b. 16 and 12;
  - c. 24 and 8;
  - d. 28 and 30;
6. Two bells ring together at 10:45 a.m. One bell rings every 9 minutes and the other every 12 minutes. When will they next ring together?
- 7.
- a. What is the smallest number which is divisible by 2, 3, and 4?
  - b. (\*) We have a large bag of apples. If we try dividing them evenly among 2, 3, or 4 people, every time there will be 1 apple left. However, they can be evenly divided among 5 people. How many apples are there in a bag (it is known that it contains not more than 70 apples)?