MATH 4: Homework 2

Due September 30th, before the start of the class

Instructions: Homework must be written on separate sheets of paper, clearly writing the problem number you are solving and showing all the work, not only the final answer. **Do not write answers on the page handout! Please attempt all problems.** You can use the Google Drive app on a phone or a similar method to scan your pages and make ONE PDF file to upload.

Homework must be submitted on time—at least 15 minutes before the start of the class. Homework will not be graded after the solutions are posted on Google Classroom.

Write the answers on separate sheets of paper, not between the lines

1. Which of the following numbers are divisible by 3? Which of them are also divisible by 9?

   (a) 75 432 (b) 2 772 825 (c) 5 402 070

2. Each number below is divisible by 3. One digit is covered with a smiley face. Try to guess what this digit is (you may find more than one answer).

   2☺5 46☺ 7346☺ 4☺56 ☺14 5☺3

3. Each number below is divisible by 9. One digit is covered with a smiley face. Try to guess what this digit is.

   8☺5 99☺ 73☺46 1☺346 ☺34 114☺5

4. Elephant-father weighs 200 kilograms more than the Elephant-mother. Elephant-mother weights 500 kilograms more than the Elephant-son. This family of three weighs 1.6 tons together (1800 kg). What is the weight of Elephant-son?

5. Mike has 5 candies more than John. John has 8 candies less than Sam. Together, they have 19 candies. How many candies does each boy have?

6. Place parentheses into the following expression so that the statement is true.

   a) $96-12*6:3=8$

   b) $64:64-8*4=2$

   c) $63:9+54=1$

   d) $75-15:5+10=22$

7. Draw two rays, AB and CD, in such a way that they intersect

   a) by a point

   b) by a segment

   c) don't intersect at all

8. On the segment *AB,* mark point *M*. How many segments do we have on the picture?

   Mark another point *P*. How many segments do we have now?

   Mark a third point *F*. Count segments.

   How many segments will there be if you mark 5 points?

   10 points? 99 points?