Practice 2.3 (November 14)

Link to the poll: https://goo.gl/forms/CDXubqHnFvwBynnj1. Closed: Monday, 10 pm.
Remember: the problems must me solved without algebraic methods.

1. Choose an appropiate interval and scale to represent numbers 3,0045, 3,0247, 3,1101, 3,0909, and 2,9809 in the following number line.
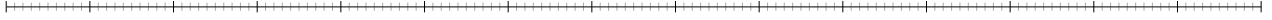
2. How many numbers with 5 decimal digits are bigger than 2,3434 and smaller than $2,\overline{34}$? Write them.

3. Represent as an irreducible fraction the following decimal numbers:

   a) 2,73   b) $2.\overline{47}$ c) $2,4\overline{7}$ d) $0,2\overline{9}$

4. ⓒ Consider the expression $1'0\overline{8} \div 2'\overline{7}$.

   a) Compute the exact result.
   b) Approximate the result to 2 decimal digits.

5. ⓒ In the USA, car gasoline consumption is measured by the miles the car makes with one *galon* of gasoline. If an European car consumes 6 liters per 100 km, and a similar American model makes 38 miles per galon, which car is more efficient?

6. In each of the following cases some information about rational numbers A and B is given. What can you say about the numbers $A \times B$, A/B y B/A?

   a) $0 < A < B < 1$.   b) $0 < A < 1 < B$.   c) $1 < A < B$.

7. ⓒ Draw a plane model of the earth-moon system. Search the data you need and choose an appropriate scale (the earth, the moon, preserving relative sizes and distances).

8. In a rather misogynist club there are 300 partners, and only 1 out of 100 are women. How many men should leave the club if we want that 2 out of 100 partners are women?

9. The amount of money two friends had was in the ratio 3 : 2. When each friend spent 35 euros, the ratio changed to be 5 : 3. How much money did the friends have at the beginning?

10. A textile factory has made 1600 coats in 20 days, working 8 hours per day. How much should the labour force be increased if they have an order of 2400 coats that have to be ready in 15 days, knowing that the workday is increased to 10 hours?

11. Luis and Marta have some money. If Luis spends 38 euros the ration of the amount of money Luis has to the amount of Money Marta has will become 2 : 5. If Marta spends 38 euros, the ratio will become 8 : 13. How much money does each friend have?