MATH 4: Homework 13

Due January 13, before the start of the class

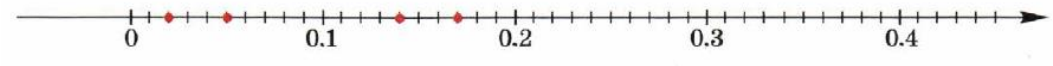
Homework must be submitted on time—at least 15 minutes before the start of the class. Homework will not be graded after the solutions are posted on Google Classroom.

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

1. Write in decimal notation the following fractions:
   Example:
   $$1\frac{3}{25} = 1 + \frac{3}{25} = 1 + \frac{3 \cdot 4}{25 \cdot 4} = 1 + \frac{12}{100} = 1.12$$
   $1\frac{3}{10}$; $2\frac{7}{10}$; $25\frac{24}{100}$; $90\frac{3}{100}$; $7\frac{3}{100}$; $5\frac{303}{1000}$; $601\frac{9}{1000}$ $7\frac{87}{10000}$; $11\frac{653}{10000}$

2. Which numbers are marked on the number lines below:

   a)
   

   b)
   

3. On graph paper, draw a number line; use 10 squares as a unit. Mark points with coordinates 0.1, 0.5, 0.7, 1.2, 1.3, 1.9.

4. Evaluate in the most convenient way:
   Example: $2.6 + 3.72 - 1.6 + 2.28 = 2.6 - 1.6 + 3.72 + 2.28 = 1 + 6 = 7$

   $a.\ 1.2 + 2.3 + 3.4 + 4.5 + 5.6 + 6.7 + 7.8;$

   $b.\ 2.3 + 3.4 + 4.5 - 5.6 + 6.7 + 7.8 - 8.5 + 9.2;$

   $c.\ 1.7 + 3.3 + 7.72 + 3.28 + 1.11 + 8.89;$

   $d.\ 18.8 + 19 + 12.2 + 11.4 + 0.6 + 11;$

5. Convert the fractions into decimals or decimals to fractions and evaluate the following expressions. Present the answer in decimals.

   Example: $\frac{3}{2} + 0.5 = \frac{3 \cdot 5}{2 \cdot 5} + 0.5 = \frac{15}{10} + 0.5 = 1.5 + 0.5 = 2.0$

   Or use division $\frac{3}{2} = 3 : 2 = 1.5$

	1.	5
2	3.	0
−	2	
	1	0
−	1	0
		0

   $a.\ \frac{3}{2} + 0.5;$ $b.\ \frac{30}{4} \cdot 0.9;$ $c.\ \frac{3}{15} \cdot 0.15$

   $d.\ 0.6 - \frac{2}{5};$ $e.\ 0.3 : \frac{21}{70};$ $f.\ \frac{9}{20} : 0.03$

6. Take a printer-size page (the one on which your homework is printed or any other page with a similar size). Use a ruler with centimeters.
   a. Write the width and the length of the page in centimeters as decimal numbers.
   b. Multiply the width by the length to get the area of the page.
   c. Now, write the width and the length in units of meters. Remember, 1 cm is 100^{th} of a meter (you must divide both numbers by 100). Find the area of the page using the new values.