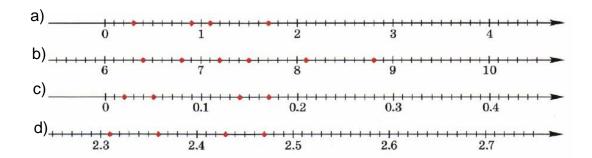
Math 4e. Homework 8.



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



2. Evaluate (try to do it by convenient way):

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

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

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

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

3. On a 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. Write decimals as fractions and evaluate the following expressions:

Example:

$$\frac{1}{3} + 0.12 = \frac{1}{3} + \frac{12}{100} = \frac{1}{3} + \frac{3}{25} = \frac{25}{75} + \frac{9}{75} = \frac{34}{75}$$

a.
$$\frac{2}{3} + 0.5$$
;

b.
$$\frac{1}{3} \cdot 0.9$$

a.
$$\frac{2}{3} + 0.5$$
; b. $\frac{1}{3} \cdot 0.9$; c. $\frac{3}{16} \cdot 0.16$

d.
$$0.6 - \frac{2}{5}$$
 e. $0.4 : \frac{2}{7}$; f. $\frac{9}{20} : 0.03$

$$e. 0.4:\frac{2}{7}$$

$$f. \frac{9}{20}:0.03$$

5. Evaluate:

$$a.25 - 30$$

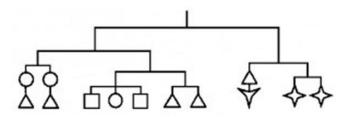
$$b. 25 + (-30)$$

c.
$$25 - (-30)$$
;

$$a.25-30$$
; $b.25+(-30)$; $c.25-(-30)$; $d.25-(+30)$; $e.25+30$;

$$e.25 + 30$$

6. On the picture below, every arm of the balance is in equili6brium. (The horizontal bars are suspended at their midpoints.) Identical shapes have identical masses. The mass of the square is 1 kg. What are the masses of the other shapes?



7. Which part of 1 m is 1 cm?

Which part of 1 km is 1 m?

Which part of 1 cm is 1 mm?

Which part of 1 m is 1 dm?

Which part of 1 kg is 1 g?

Which part of 1 g is 1 mg?

Example: 1 cm. = 0.01 m,

(Hint: kilo- means \times 1000, 1 kilometer = 1000 meters.

milli- means \div 1000, 1 millimeter = $\frac{1}{1000}$ (0.001) meter

centi- means ÷ 100,

deci- means ÷ 10)

- 8. 1 kilogram of candies costs 16 dollars. How much
 - a. 0.5 kg will cost?
 - b. 1.2 kg will cost?
 - c. 0.75 kg will cost?

- d. 0.4 kg will cost?
- e. 2.5 kg will cost?
- 9. Fill the tables.

b	c	b+c
$\frac{1}{10}$	2 5	
$\frac{1}{3}$		$\frac{1}{2}$
	$\frac{1}{5}$	$\frac{1}{4}$

b	c	b-c
$\frac{1}{2}$	$\frac{1}{7}$	
<u>5</u> 8		$\frac{1}{4}$
	$\frac{1}{5}$	$\frac{1}{2}$

10. Fill up the empty places for the equality to hold (distributive property)

$$a. \quad 10 + \bigcirc \cdot x = 5 \cdot (\bigcirc +x)$$

c.
$$320a + 250b = (32a +)$$