Math 4a. Homework 11.



1. Evaluate:

a.
$$\frac{1-\frac{1}{2}}{\frac{1}{2}-\frac{1}{3}}$$
; b. $\frac{\frac{1}{3}+\frac{1}{4}}{2-\frac{5}{6}}$; c. $(\frac{3}{4}+\frac{1}{6})\cdot 3+(\frac{5}{6}-\frac{1}{2})\cdot \frac{2}{9}$;

- 2. There are three short stories in a book. Paulina read the first story in $\frac{1}{3}$ of one hour. She spent $\frac{1}{6}$ of an hour more reading the second story than reading the first one. The third story she read in $\frac{7}{12}$ of an hour less than the two previous stories together. How much time did it take her to read this book?
- 3. Find the coordinates of the points:

Example: A(-4)

4. Continue numbers on both sides of the sequence by three numbers:

Example:
$$a$$
. -40 , -39 , -38 , -37 , -36 , -35 , -34 , -33 , -32

$$a. \dots, -37, -36, -35, \dots; b. \dots, 2, 3, 4, 5, \dots; c. \dots, -98, -97, -96, \dots$$

- 5. The fourth grade is going on a school trip. Every student had to bring in \$64 for the trip to cover all costs. Unfortunately, 3 students could not participate on the trip. Therefore, every student who went on the trip had to bring in \$4 more so those who did not go could get their money back. How many students went on the trip?
- 6. The bus A comes every 9 minutes and the bus B comes every 12 minutes. If both buses arrive at exactly 10:00 am, what is the first time they will both arrive together after 11:00 am?

7. Which sign $(+, -, \cdot, \div)$ should be placed instead of * to make the following equalities true statements.

$$\frac{7}{8} * 1\frac{1}{7} = 1$$

$$2 * 1\frac{1}{3} = \frac{2}{3}$$

$$\frac{3}{7} * \frac{4}{7} = \frac{3}{4}$$

$$\frac{3}{10} * \frac{5}{6} = \frac{1}{4}$$

8. A boy has as many brothers as sisters, but his sister has twice less sisters than brothers. How many girls and how many boys are in this family?