

Math 5b, homework 15.



1. Write decimal representation of fractions:

$$\frac{4}{7}; \quad \frac{3}{16}; \quad \frac{12}{24}; \quad \frac{14}{35}; \quad \frac{3}{11};$$

2. Represent the periodic infinite decimals as fractions:

$$0.\bar{5}, \quad 0.\overline{51}, \quad 0.2\overline{35}, \quad 0.0\bar{1}, \quad 0.1\overline{25},$$

3. Evaluate (try to do it by the easiest possible way) :

$$\frac{7777777 \cdot 7777777}{1 + 2 + 3 + 4 + 5 + 6 + 7 + 6 + 5 + 4 + 3 + 2 + 1} - \frac{5555555 \cdot 5555555}{1 + 2 + 3 + 4 + 5 + 4 + 3 + 2 + 1};$$

4. Solve the equations:

a.  $|x + 4.35| = 12.3$

b.  $|25 - 4y| = 1$

5. In still water, John's boat goes 4 times as fast as the river flow. He takes a 20 kilometers trip up the river and returns in 4 hours. Find the speed of the river flow.
6. At what percentage is it more profitable to put money in the bank for a year: 6% per year or 0.5% per month?