Math 5b, homework 18.

1. Fill the table using algorithm on the picture.

| $a$ | $1 \frac{2}{7}$ | $2 \frac{3}{7}$ | $2 \frac{4}{7}$ | $3 \frac{1}{7}$ | $4 \frac{6}{7}$ | $5 \frac{5}{7}$ | $10 \frac{3}{7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $x$ |  |  |  |  |  |  |  |

2. How many grams of jam with $50 \%$ sugar should be added to 100 g of jam with $30 \%$ sugar, to get $35 \%$ sugar jam.
3. Write an algorithm to add two 3-digit naturel numbers by column addition.
4. Mary told Robert to multiply a number by 4 and add 15 to the result, but Robert multiplied the number by 15 and then added 4 . However, the answer was correct. What was the number?
5. Solve the equation:

$$
2 \cdot\left(0.3 x-\frac{2}{9}\right)-\left(-1 \frac{1}{9}+\frac{2}{3} x\right)=\frac{x}{5}
$$

6. Which of the numbers is larger: $1-2+3-4+5-\ldots+99-100$ or $1+2-3+$ $4-5+6-\ldots-99+100$ ?
7. Simplify the following fractions:
$\frac{135+315}{15}$,
$\frac{49+84}{77}$,
$\frac{a m+5 a}{m+5}$,
$\frac{252+168}{132-12}$
$\frac{5 k x-5 x a}{k-a}$,
$\frac{35 b}{7 b a+7 b x}$,


