Math 4a. Homework 7.



1. Find the value of the expression by the most convenient way:

$$\left(\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5}\right) + \left(\frac{2}{3} + \frac{2}{4} + \frac{2}{5}\right) + \left(\frac{3}{4} + \frac{3}{5}\right) + \frac{4}{5};$$

- 2. $\frac{1}{7}$ of all students in the class is 4. How many students are there in the class?
- 3. $\frac{2}{5}$ of all students in a class is 10. How many students are there in a class?
- 4. In the school cafeteria there are 12 tables. There are 10 seats at each table. At the lunch time $\frac{4}{5}$ of all sits were occupied by students. How many students were in the cafeteria?
- 5. Evaluate:

a.
$$\frac{1}{3} \cdot \frac{2}{7}$$

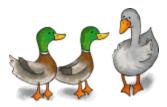
$$b. \ \frac{1}{2} \cdot \frac{5}{6};$$

$$c. \quad \frac{1}{2} \cdot \frac{1}{3}$$

$$d. \quad \frac{3}{5} \cdot \frac{1}{2} \cdot \frac{4}{9}$$

a.
$$\frac{1}{3} \cdot \frac{2}{7}$$
; b. $\frac{1}{2} \cdot \frac{5}{6}$; c. $\frac{1}{2} \cdot \frac{1}{3}$; d. $\frac{3}{5} \cdot \frac{1}{2} \cdot \frac{4}{9}$; e. $\frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5}$

$$f. \quad \frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} \cdot \dots \cdot \frac{23}{24} \cdot \frac{24}{25}$$



6. Evaluate:

$$a. \frac{14}{15} \cdot \frac{10}{49} + 5\frac{3}{7};$$
 $b. 1\frac{3}{11} - \frac{27}{44} \cdot \frac{4}{9}$
 $c. 1\frac{2}{3} + \frac{14}{15} \cdot \frac{5}{7}$

b.
$$1\frac{3}{11} - \frac{27}{44} \cdot \frac{4}{9}$$

$$c.1\frac{2}{3} + \frac{14}{15} \cdot \frac{5}{7}$$

- 7. 4 little ducklings and 5 little geese weight 4 kg and 100 g. 5 little ducklings and 4 little geese weight 4 kg. How much does one little goose weight?
- 8. Cut each square on a picture below into 4 equal parts, so that each part will have one "X".

| X | X | |
|---|---|--|
| X | X | |
| | | |

| X | | | |
|---|---|---|---|
| | X | | |
| | | X | |
| | | | X |

| | | X | |
|---|---|---|--|
| X | X | X | |
| | | | |