

## Classwork 15.



### Test

1. a.  $\frac{(2^3 \cdot 2^4)^6}{(2 \cdot 2^8)^4}$ ;

b.  $\frac{12^9}{9^4 \cdot 2^{16}}$ ;

2. Represent as decimal:

a.  $\frac{3}{32}$ ;

b.  $\frac{5}{9}$ ;

3. Represent as fraction:

a. 0.32;      b.  $0.3\bar{2}$ ;      c.  $0.\overline{32}$ ;

4. The ratio of the number of boys to the number of girls in the school is 5 to 6.  
What fraction of all the students in the school are boys, and what fraction are girls?

5. During the year, the prices of strudels were increased twice by 50%, and before New Year they started being sold at half price.

How much does one strudel cost now, if at the beginning of the year it cost 4 dollars?

6. Evaluate:

a.  $-18 - 10 \cdot (-0.1)^2$ ;

b.  $5 \cdot (-1)^3 - 4 \cdot (-0.2)^2 - 8$ ;

7. If Anna walks to school and takes the bus on the way back, she spends a total of 1.5 hours on the trip. If she takes the bus both ways, the whole journey takes 30 minutes. How much time will Anna spend on the trip if she walks both to and from school?

8. It is known that the numbers  $a$  and  $b$  are negative, with  $a > b$ , and the numbers  $m$  and  $n$  are positive, with  $m < n$ .

Compare the following:

a.  $m - b$  and  $n - b$ ;

b.  $a + n$  and  $b + m$ ;

c.  $|a|$  and  $|b|$

9. Evaluate:

$$\frac{3.6 \cdot 1\frac{13}{15} \cdot 0.3}{4\frac{1}{5} \cdot 0.16}$$