

MATH 4: Homework 3

Due October 7, before the start of the class

Homework must be submitted on time—at least 15 minutes before the start of the class.
Homework will not be graded after the solutions are posted on Google Classroom.

Write the answers on separate sheets of paper, not between the lines

- Factorize (represent as a product of two or more factors; do not use 1 as a factor):
36; 100; 125; 178; 200.
- Fill the empty boxes in the table (draw the table in your notebook):

a	9	24	24		77		0	75
b	5	6		12		72	25	1
$a \cdot b$			168	96				
$a : b$					7	9		

- Using the first equality, find the values of the other two:
 - $945:35=27$; $27 \cdot 35=?$; $945:27=?$;
 - $555:15=37$; $555:37=?$; $15 \cdot 37=?$;
- Calculate by grouping the identical terms:
 - $9 + 5 + 5 + 9 + 9 + 5 + 9 + 5 + 9 + 5 + 9 + 5 + 5$;
 - $6 + 3 + 6 + 2 + 3 + 2 + 6 + 2 + 3 + 3 + 2 + 2$.
- Evaluate (you can factor numbers to get a product of 10):
 - $3 \cdot 5 \cdot 2 \cdot 7$; Example: $3 \cdot 5 \cdot 2 \cdot 7 = (5 \cdot 2) \cdot (3 \cdot 7) = 10 \cdot 21 = 210$
 - $5 \cdot 5 \cdot 6 \cdot 4$;

- c. $7 \cdot 2 \cdot 5 \cdot 2 \cdot 5$
- d. $2 \cdot 9 \cdot 5 \cdot 5 \cdot 4$;
- e. $8 \cdot 4 \cdot 125$;
- f. $5 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 \cdot 5 \cdot 6$;

6. Rebecca wants to decorate the box with a ribbon for her friend Alice's birthday present, as shown in the picture. How long should the ribbon be if she wants to leave 90 cm for the ends and the bow?



7. The cinema has two auditoriums: a large one and a small one. The large auditorium has 40 rows, with 45 seats in each row. The small auditorium has 25 rows, with 24 seats in each row. How many times does the number of seats in the large auditorium exceed the number of seats in the small auditorium?