

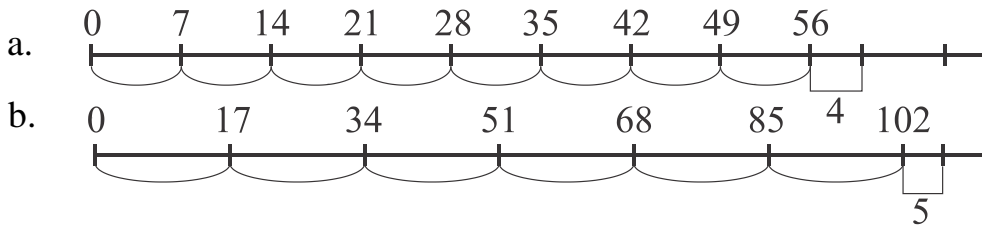
Math 4a, Homework 4.



1. Represent numbers 64, 75, and 93 as a product of prime numbers.
2. Find the prime factorization of the number:

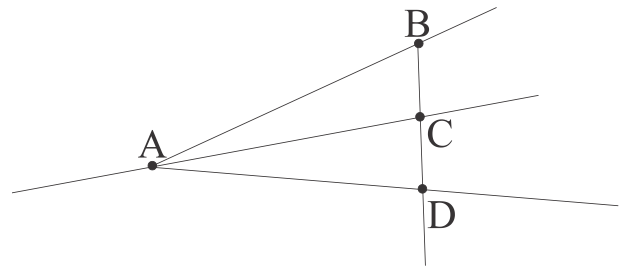
$$2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot 10$$

3. Using the pictures below, find dividend, divisor, quotient, and remainder. Write them in the form $a = b \cdot c + r$ ($r < c$).



4. In the number 5 236 845 cross out three digits so that the resulting number will be
 - a. Biggest possible number
 - b. Smallest possible number
5. There are 4 children in the family. They are 5, 8, 13, and 15 years old and their names are Julia, Peter, Mary and Ellen. What is the age of each of them if one of the girls goes to kindergarten, Julia is older than Peter, and sum of ages of Julia and Mary is divisible by 3?

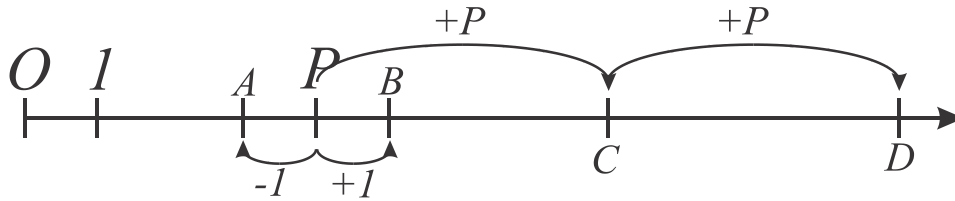
6. Name all lines, segments and rays on the picture below. (Example : segment [BC])



7. Robert did his math assignment but he stained his notebook. Each drop of ink covers the same digit, which is greater than 0. Please, restore his homework!

$$(\text{b} + \text{b} + 1) \times \text{c} = \text{bb}$$

8. On a number line we marked numbers A, B, C, D. Can numbers A, B, C, D be prime numbers if number P is a prime number? Explain your answer. Can three consecutive numbers be prime numbers?



9. Read the following statements:
- All prime numbers are even numbers.
 - All odd numbers are prime numbers.
 - All prime numbers greater than 2 are odd numbers.
 - All odd numbers greater than 2 are composite numbers.
- Which statement is true statement and which is false?
10. Can a sum of two prime number be a prime number? Can a product of two prime be a prime number?
11. Draw 3 different segments. Find their length. Draw segments of length 2 cm, 5 cm, 7 cm. Use ruler! Each segment should have ends. Name your segments with capital letters. Write their length:
- Example: $|AB| = 2 \text{ cm}$. ($|AB|$ means the length of the segment $[AB]$)