

Math 4a. Homework 5.

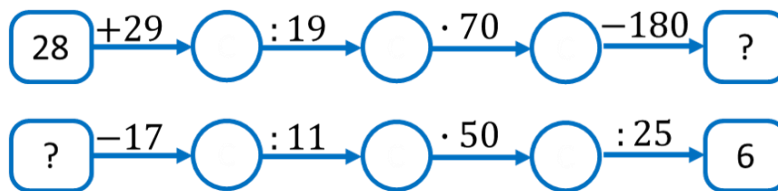


1. Do you think that among four consecutive natural numbers, there will be at least one that is divisible by a) 2? b) 3? c) 4? d) 5? Explain your answer.
2. Among the numbers 5, 7, 21, 25, 28, 35, 42, 56, 75, 80 choose those that
 - a. are multiples of 5
 - b. are divisors of 100
 - c. are not divisors of 42
 - d. are multiples of 4 and 7
 - e. are multiples of 4 or 7.
3. Are there four prime numbers such that the product of two of them is equal to the product of the other two?

4. There are bicycles and tricycles in a daycare center, 21 in total. The total number of wheels on all tricycles and bicycles is 55. How many tricycles and how many bicycles are there in the daycare? (Hint: how many wheels would be there if there were only tricycles?)



5. Knives are sold 10 to a package, forks are sold 12 to a package, and spoons are sold 15 to a package. If you want to have the same number of each item for a party, what is the least number of packages of each you need to buy?
6. Which number could be placed instead of “?” ?



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!

$$(\text{●} + \text{●} + 1) \times \text{●} = \text{●●}$$