

Problems From Beginner (Level 1) Problem Solving

1. The number $2.5252525\dots$ can be written as a fraction. When reduced to lowest terms, what is the sum of the numerator and denominator of this fraction?
2. How many three-digit numbers are there with only even digits?
3. For two particular prime numbers, their sum and difference are also prime. What are these prime numbers?
4. In quadrilateral $ABCD$, $AB = BC$, $\angle ABD = 30^\circ$, $\angle C = 50^\circ$, and $\angle CBD = 80^\circ$. Find the measure of $\angle A$.