(1) (6) Find the sum
\[ 1 + 3 + 5 + \cdots + 97 + 99 \]

(2) (7) Let \( a \) be any integer in the set \( \{0, 1, \ldots, 9\} \). For how many \( a \) is the number \( 3a512a46a \) divisible by 7 and only 7?

(3) (8) Determine the number of consecutive zeroes at the right end of the decimal expansion of
\[ \left( \left( \frac{2010^{2009}}{2008} \right)^{2008} \right)^{1} \]
where \( 2010 = 2 \cdot 3 \cdot 5 \cdot 67 \).

(4) (10) Find the real number \( x \) such that
\[ x + 2x^2 + 3x^3 + 4x^4 + \cdots = 30 \]

(5) (11) Let \( a, b, c, d > 0 \) be real numbers such that \( a + b + c + d = 6 \). Find the minimum value of
\[ \left( a + \frac{1}{b} \right)^2 + \left( b + \frac{1}{c} \right)^2 + \left( c + \frac{1}{d} \right)^2 + \left( d + \frac{1}{a} \right)^2 \]

(6) (13) Compute
\[ \frac{1}{e \times \pi} + \frac{1}{\pi \times (2\pi - e)} + \frac{1}{(2\pi - e) \times (3\pi - 2e)} + \frac{1}{(3\pi - 2e) \times (4\pi - 3e)} + \cdots \]

(7) (14) Find the sum of all integers \( 0 \leq x \leq 100 \) such that \( f(x) = x^2 - 3x + 27 \) is divisible by 37.

(8) (15) What is the largest integer less than or equal to \( (\sqrt{3} + \sqrt{2})^6 \)?

(9) (16) Let \( A \) be a set of real numbers such that there always exists \( x, y \) in \( A \) with the following property:
\[ 0 \leq \frac{x - y}{1 + xy} < \frac{1}{\sqrt{3}} \]
What is the minimum number of elements of \( A \) such that this holds for any set \( A \)?