

**ACSL**  
**American Computer Science League**    **Contest #1**  
**Elementary Division**

**1. Computer Number Systems**

What is the octal equivalent for  $A6C2E_{16}$ ?

**2. Computer Number Systems**

Which is the largest number?

$375_8$

$100_{16}$

$11111110_2$

$255_{10}$

**3. Computer Number Systems**

Which has the most 1's in its binary representation?

$414_8$

$1B5_{16}$

$A68_{16}$

$524_8$

**4. Computer Number Systems**

Evaluate the following expression and write your answer in base 10:

$$(57_8 + 11_2 * 14_{16} - 57_{10}) * 100_2$$

**5. Computer Number Systems**

What is the difference between the BLUE component of the color 'A2B3C4' and the color '3F2E1D' in hexadecimal?