1. What is the binary number 1101 in decimal?

13

2. What is the decimal number 234 in binary?

1110 1010

3. Convert the hexadecimal number A3D into binary.

1010 0011 1101

4. Add 1010001 and 111111 in binary. Convert the answer to decimal. Verify your answer by first converting the binary numbers into decimals, then adding.

144

5. What is the largest unsigned (positive) 4-bit binary number? What is the largest unsigned N-bit binary number?

largest unsigned (positive) 4-bit binary number:1111

largest unsigned N-bit binary number: 2^n-1

6. Convert the following decimal numbers to hexadecimal numbers.

a. 1010

3F2

b. 1410

582

c. 5210

145A

d. 84510

14A1E

7. How many bytes are in a KB (kilobyte)? In a MB (megabyte)? In a GB (gigabyte)?

10^3,10^6, and 10^9 bytes