

1. Convert the following numbers from binary to decimal
 - (a) 101
 - (b) 1100110
 - (c) 001100
2. Convert the following numbers from decimal to binary
 - (a) 56
 - (b) 123
 - (c) 101
3. Add the following binary numbers
 - (a) $0011 + 0101$
 - (b) $010110 + 001111$
 - (c) $00110101 + 01110011$
4. Further exploration:

Suppose a computer uses one byte (8 bits) to represent each (unsigned) integer.
What happens if you add 91 to 167?
5. Optional follow-ups:
 - What are hexadecimal numbers?
 - How would you convert hexadecimal to decimal?
 - How would you convert hexadecimal to binary?
 - How would you add hexadecimal numbers?

Answers:

1. (a) 5
(b) 102
(c) 12
2. (a) 111000
(b) 1111011
(c) 1100101
3. (a) 1000
(b) 100101
(c) 10101000