Week 3 Questions

Number Conversions

Binary to Decimal

- 10011
- 111010
- 100101

Decimal to Binary

- What are the two methods of converting decimal to binary?
- Convert these numbers
 - o 49
 - o 82
 - o 106

Octal to Decimal and Binary

- 27
- 20
- 17

Decimal to Octal

- 16
- 29
- 17

Hexadecimal to Decimal and Binary

- 4
- E
- FF
- 12

Binary Addition

- How do we add two numbers?
- Add the following binary numbers
 - o 1001, 1101
 - o 11011, 01101

Questions

- What's another way to view subtraction?
- Explain one's compliment
- What's wrong with one's compliment?
- Explain two's compliment (One's compliment + 1)
- Convert these positive numbers into binary and then make them negative with two's compliment
 - o 20
 - o 12
 - 0 9
- Name some different types of number representations
- What does unsigned mean?
- How many bits does it take to store a character?