2. Conversion

Calculate the normalised binary number for -3.75. Show your working

- -3.75 = 100.01000 // -4 + 1/4 // -4 + 0.25
- 100.01000 becomes 1.0001000 Exponent=+2
- Answer: Mantissa=1.0001000 Exponent=0010

Calculate the normalised floating-point representation of +1.5625 in this system (12bit-mantissa, 4bit-exponent). Show your working

- Correct conversion to binary: 01.1001
- Correct calculation of the exponent: 1
- Answer: Mantissa=0110 0100 0000 | Exponent= 0001