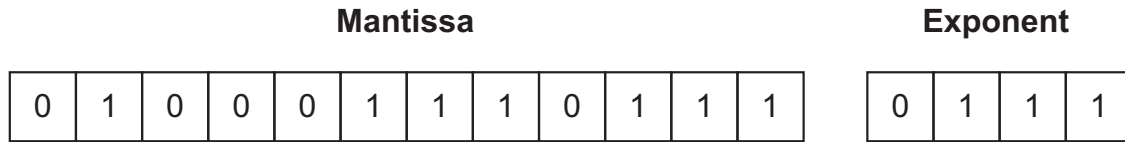


4 Numbers are stored in a computer using binary floating-point representation with:

- 12 bits for the mantissa
- 4 bits for the exponent
- two's complement form for both the mantissa and the exponent.

(a) Calculate the denary value of the given normalised binary floating-point number.

Show your working.



Working .....

.....

.....

Answer .....

[2]

(b) Calculate the normalised binary floating-point representation of  $-49.1875$  in this system.

Show your working.



Working .....

.....

.....

.....

.....

.....

.....

.....

[4]