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

- 10 bits for the mantissa
- 6 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.

Mantissa

0	1	1	1	1	0	0	1	0	1

Exponent

0	0	1	0	1	1

Working .....

.....

.....

.....

.....

Denary value .....

[3]

(b) Calculate the normalised binary floating-point representation of +26.6875 in this system.
Show your working.

Mantissa

Exponent

Working .....

.....

.....

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.....

.....

[3]