$\bullet$  This gives rise to the normalised fraction  $0.5 \leq f \leq 1.0$ 

e.g.

```
.100000002 1/512 absolute error (.0019) : 0.4% .111111112 1/512 absolute error: 0.2%
```

## **2.10.3** Exponent

The convention is to use the Excess-K notation.

• To explain this further it is appropriate to use one of the VAX formats.

## 2.11 The VAX formats

The Alpha supports amongst its various data representations, the vax floating point formats. These are designated;

- F (Floating, Single precision, 32 bits, 2 words, 4 bytes)
- D (Double precision, 64 bits, 4 words)
- G (Grand 64 bits)
- H (Huge 128 bits 8 words, quadruple precision)

(The sign appears on the 16-bit word boundary which is an historic artifact reflecting the days of the PDP-11).