

3e. 12.75  $\rightarrow$  octal

$$12 = 1100$$

$$0.75 \times 2 = 1.5$$

$$0.5 \times 2 = 1.0$$

$$\left. \begin{array}{l} 01100.110 \\ \hline 1 \quad 4 \quad 6 \end{array} \right\}$$

$\rightarrow$  3f. 125.32  $\rightarrow$  hexadecimal

$$\begin{array}{r} \overline{125} \mid 2 \\ 05 \quad 62 \mid 2 \\ \downarrow \quad \downarrow \\ 1 \quad 0 \quad 31 \mid 2 \\ \downarrow \quad \downarrow \\ 1 \quad 15 \mid 2 \\ \downarrow \quad \downarrow \\ 1 \quad 7 \mid 2 \\ \downarrow \quad \downarrow \\ 1 \quad 3 \mid 2 \\ \downarrow \quad \downarrow \\ 1 \quad 1 \end{array}$$

$$\begin{array}{r} 01111101,01010001 \\ \hline 7 \quad D \quad , \quad 5 \quad 1 \end{array}$$

$$0.32 \times 2 = 0.64$$

$$0.64 \times 2 = 1.28$$

$$0.28 \times 2 = 0.56$$

$$0.56 \times 2 = 1.12$$

$$0.12 \times 2 = 0.24$$

$$0.24 \times 2 = 0.48$$

$$0.48 \times 2 = 0.96$$

$$0.96 \times 2 = 1.92$$

$\rightarrow$  6c.  $F = x + yz$

$$F = (x + y)(x + z)$$

$\rightarrow$  6d.  $F = (A + B + C)(D + A) + BC + AC =$

$$= (A + B + C)(D + A) + C(B + A) = ((A + B + C)(D + A) + C)$$

$$= ((A + B + C)(D + A) + (B + A)) = (A + B + C) \cdot (D + A + C) \cdot (A + B + C)(A + B + D)$$

$$F = \cancel{A}D + BD + CD + A + \cancel{B}A + \cancel{C}A + BC + \cancel{A}C =$$

$$= A + CD + BC + BD$$

$$\boxed{7f} \quad F = [(\Delta \bar{B}) \Delta] [(\overline{\Delta B}) B] = 0$$

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module func(input A, input B, output f)
    assign f = 0;
end module

```

→  $\boxed{7f}$   $F = xy(v+w)[(x+y)v]$

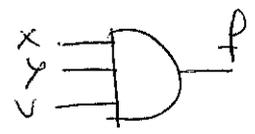
$$F = (xyv + xyw)(xv + yv) =$$

$$= xyv + xyv + xyvw + xyvw =$$

$$= xyv$$



		xy			
		00	01	11	10
v	0	0	0	0	0
	1	0	0	1	0
		f			



```

module func (input x, input y, input v)
    assign f = x & y & v;
end module

```