Rechenanlagen
Übungsblatt 5

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Übung :Dienstag 14:00

Aufgabe 5.1

```
1          ENTITY xnor IS
2            PORT (x,y : IN bit; z : OUT bit)
3          END xnor
4          ARCHITECTURE behavior OF xnor IS
5            CONSTANT tdhl : TIME := 25ps;
6            CONSTANT tdlh : TIME := 45ps;
7          BEGIN
8            PROCESS(x,y)
9            BEGIN
10             IF x=y
11               THEN z <= '1' AFTER tdlh;
12               ELSE z <= '0' AFTER tdhl;
13             END IF
14           END PROCESS
15         END behavior
```

Aufgabe 5.2

$\bar{a} \vee by$

$\overline{(\overline{(\bar{a} \vee by)})}$

$\overline{((a\bar{b} \vee \bar{y}))}$

$\overline{(\bar{a} \text{ nor } \bar{b} \text{ nor } y)}$

$\bar{a}$ nor $\bar{b}$ nor y nor $\bar{a}$ nor $\bar{b}$ nor y

$(a \text{ nor } a)$ nor $((b \text{ nor } y) \text{ nor } (b \text{ nor } y))$ nor $((a \text{ nor } a) \text{ nor } ((b \text{ nor } y) \text{ nor } (b \text{ nor } y)))$

Aufgabe 5.3