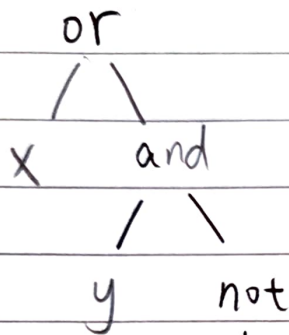


Date. 28.10

Aufgabe 3. (not > and > or)

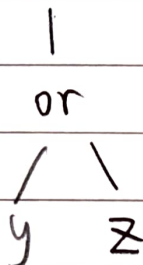
(a) i)

$$(x \text{ or } (y \text{ and } (\text{not } (y \text{ or } z))))$$



i) $x = \text{True}, y = \text{False}, z = \text{True}$

$$(x \text{ or } (y \text{ and } \text{not}(y \text{ or } z)))$$
$$= (T \vee (F \wedge \neg(F \vee T)))$$
$$= T$$

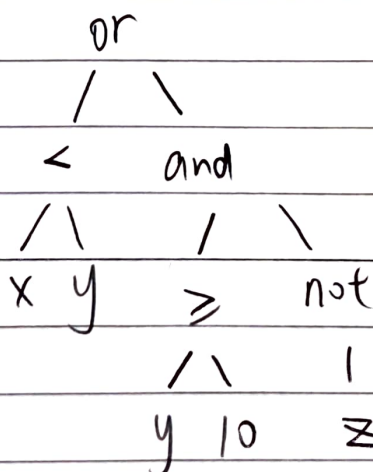


ii) $x = \text{False}, y = \text{False}, z = \text{False}$

$$(x \text{ or } (y \text{ and } \text{not}(y \text{ or } z)))$$
$$= F \vee (F \wedge \neg(F \vee F))$$
$$= F$$

(b)

$$((x < y) \text{ or } (y \geq 10) \text{ and } (\text{not } z))$$



i) $x = 20, y = 15, z = T$

$$((x < y) \text{ or } (y \geq 10) \text{ and } (\text{not } z))$$
$$= F \vee (T \wedge F)$$
$$= F$$

ii) $x = 3, y = 10, z = F$

$$((x < y) \text{ or } (y \geq 10) \text{ and } (\text{not } z))$$
$$= (T \vee (T \wedge T))$$
$$= T$$