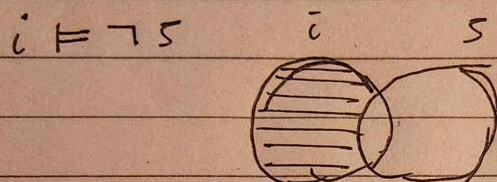
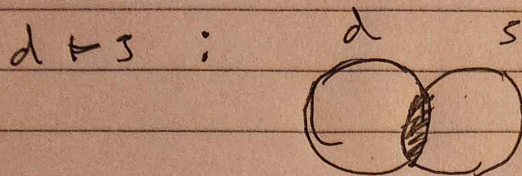


Q 7. 3

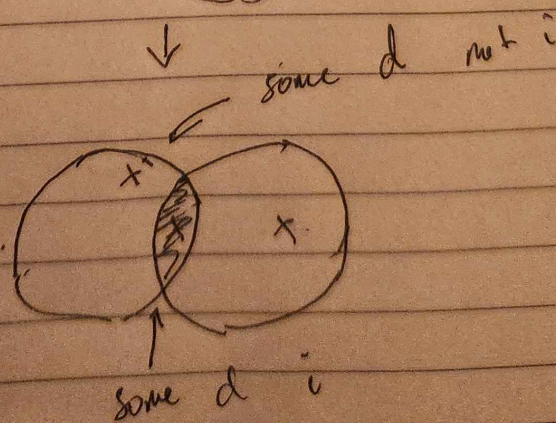
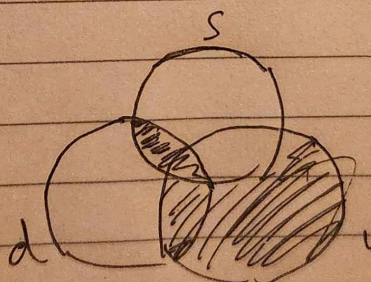
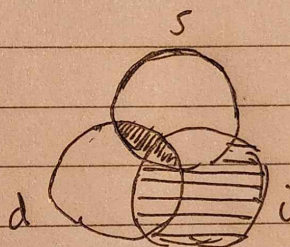
Ex 1.

$d$  = diligent  
 $i$  = ignorant  
 $s$  = successful

$$\frac{d \models s \quad i \models \neg s}{d \not\models \neg i}$$



$d \models s \wedge i \models \neg s$  :





Ex 5:

1.  $\forall x. (isBig x \wedge isAmber x) \not\models hasThickBorder x$

2.  $\exists x. isSmall x \models isDisc x$

3.  $\exists x. (isSquare x \wedge isSmall x) \models isAmber$