

(to get values  $\{ \} = \varphi(\lambda(+))$ )

$$\varphi : \varphi(\frac{2}{3}(\frac{2}{3})) = \varphi(\frac{2}{3}(\frac{2}{3}))$$

The (Tarski) o model (interpretation, proof)

Which  $T \supseteq PA^-$  (interpretation,  $PA^-$ )

Now  $A \models T$

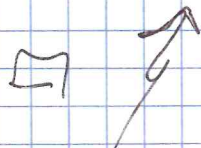
Now ist.  $\varphi(x)$  is also true.  $\varphi$

$$A \models \varphi \Leftrightarrow Tr(\varphi)$$

Does Proposition preserve truth? (if  $Tr(x)$  is true)

$$A \models \varphi \Leftrightarrow Tr(Tr(\varphi))$$

Are numbers  $A \models \varphi \Leftrightarrow Tr(\varphi)$



$$\{ \varphi : (R, +, \cdot, exp) \models \varphi \}$$

Now  $A \models 2fc$

$$\{ \varphi : A \models \varphi \}$$

~~$\{ \varphi : \varphi \text{ is provable} \}$~~

Def  $T \supseteq PA^-$  is a consistent theory, iff we  
 ist.  $\varphi(x)$  true  $T \vdash \neg \varphi(0), \neg \varphi(1), \dots$   
 $T \vdash \exists x \varphi(x)$