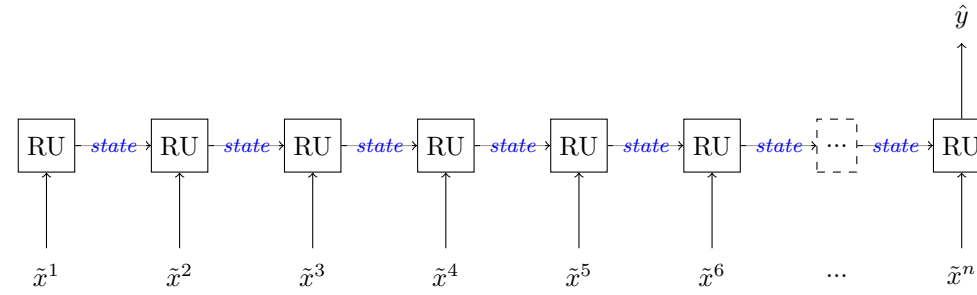


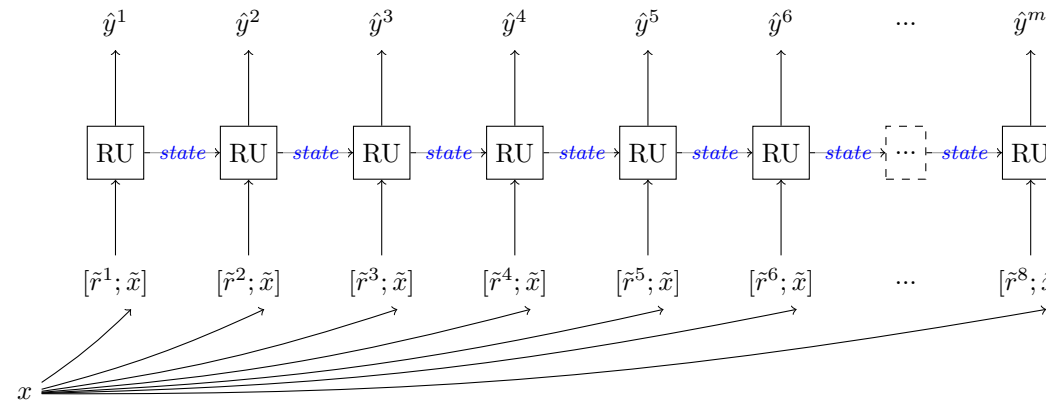
**(a) RNN Encoder:**

Variable  $n$  inputs:  $\tilde{x}^t$   
1 output:  $\hat{y}$



**(b) RNN Decoder:**

1 input:  $x$   
variable  $m$  outputs:  $\hat{y}^t$   
with prompts:  $\tilde{r}^t$  (often  $\hat{y}^{t-1}$ )



**(c) RNN Encoder-Decoder:**

Variable  $n$  inputs:  $\tilde{x}^t$   
Variable  $m$  outputs  $\hat{y}^t$   
Prompts:  $\tilde{r}^t$  (often  $y_{t-1}$ )

