

X	Y	Z	W
<u>x₁</u>	y ₁ ✓	<u>z₁</u>	<u>w₁</u>
<u>x₁</u>	y ₂ ✓	<u>z₁</u>	<u>w₂</u>
<u>x₂</u>	y ₂	<u>z₂</u>	<u>w₂</u>
<u>x₂</u>	y ₃	<u>z₂</u>	<u>w₃</u>
<u>x₃</u>	y ₃	<u>z₂</u>	<u>w₄</u>

Which FDs hold here

$$X \rightarrow Z \quad \checkmark$$

$$X \rightarrow Y \quad \times$$

$$W \rightarrow Y \quad \checkmark$$

$$XY \rightarrow Z$$

$$YZ \rightarrow X$$

$$X \rightarrow Y$$

$$X \rightarrow W$$

$$Y \rightarrow X$$

$$\cancel{Y} \rightarrow Z$$

$$Y \rightarrow W$$

$$Z \rightarrow X$$

$$Z \rightarrow Y$$

$$Z \rightarrow W$$

$$W \rightarrow X$$

$$W \rightarrow Z$$

book (Acc No, Year, title)

AccNo \rightarrow Year

A001 \rightarrow 2010

A001 \rightarrow 2015

X

one \rightarrow Many

X

A001 \rightarrow 2015

A002 \rightarrow 2015

✓✓

Many \rightarrow one

✓