lecture 12:- 1- Replexive.	Properties	of	Relations.	<u> Levisio</u>	и.
1- Reflexive.		•		Binary	Pelation.
2- Symmet	476			IAKBI	= IAIKIBI.
2- Symmet Harb EA i	f (a16) ER -	> (bia) E	R.	R S AxB.	(Alxiel
				2 ARROL = 2	, Albi
3. Anti Symm Vaib EA	(ab)ERA	(bia)ER	mazb.	is a Rel	atim R is defin . ANA.
Ex7: A=q	2,2,3,4%.				$\frac{1}{2} \frac{1}{2} \frac{6}{8} \frac{1}{8} \frac{3}{2} \frac{1}{2} \frac{3}{6}$
			N 44 1 1	:1	
R22 d (11), a b	1 4	(A), (3	5,4), (4, <u>1</u>), ((4,4))	K.
R12 8 }	_				
R3 2 2 (3,6	· ((
Ex 12: 15 the	divides 7	selation a	n Set a	of positive	. Intgers.
Red Car	b) a divid	es by		Az Zt	
Symmetric: You	h E A it (ab) ER	-7 (bia) 8	ad ER. ad	avided by bza+b=a
Symmotric: Vai Vaib & Z	t if a	divides b	-7 b	divides o	አ .
Auti Symmetric:					
Haib & Zt if	a divides	b \	b dividus	a –7	azb.
4- Transitive. H	aibic EA it	(a1b)EP	- N (b,c) 8	ER -> (a	(c) ER

4- Transitive- Harbic EA if (a1b) ERA (b,c) ER -> (a1c) ER. E_{K7} Az $\{1,2,3,4\}$. $\{1,2,4\}$ $\{1,2\}$ $\{1,2\}$ $\{1,2\}$ $\{1,2\}$ $\{1,2\}$ $\{1,2\}$ $\{1,4\}$ Rizal. Ex 12: 1s the divides relation on Set of positive Intgers.
463 Transitive. Red (a16) a divides b) Az Zt. Transitive: Yaibic & A if (aib) & RM(bic) & R -> (aic) & R. Harbic & Zt if a divides b 1 b divides C -> a divides C Ex/P467. Rif(xiy) | xy 20 } Cid(xiy) | x+y 20 } Rif(xiy) | x+y 20 } Rif(xiy) | x22y } Az Z. A27. Azz.



