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1. Because PCX) is fine for all positive

61,214

Conclosation:

integers less than 9, the truth value of

the quantification  $\forall x P(x)$  is true.

Here is the statement, 22/10,

The statement  $\forall x P(x)$  is the same as the

Consunction P(1) 1 P(2) 1 P(3) OF Print

3. Let P(X) be "X is perfect": let F(X) be "X is Your Injend."

a)  $\forall x \neg P(x)$ 

(1,0,7), (1,1,2) (2) (X) 9 X P (X)

C) Yx (F(x) -> P(x)) ( 0 0) ( 4 0)

d) =x (F(x) n P(x))

e) Vx (F(x) NP(x))

f) (¬VX (F(X)) V(∃X¬P(X))

of the most integer and a positive integer and a

4. A= \$1,23

B={a,b}

Se. 5, 8, 1 3

C={X, Y, Z}'( F 2817 U {) 2 + 817 - 8UA [6.8.8.8.9]=

AXBXC = {1,2 } x { a b } x { x. y. z }

 $=\frac{9.4.23}{2}=\{(1,a,x),(1,b,x),(1,a,y),(1,b,y),$ 

(1, a,z), (1,b,z), (2,a,x), (2,b,x), (2,a,x), (2

(M) I x (F(V) x P(D))

(Answer)

1. A = [1,2]

8=99,68

6. A={1,3,4, 5,6} ((x)9-XE)V((x)7) XAL)

B={XIX is an odd positive integer and x<10}

= { 1, 3, 5, 7,9}

AUB={1,3,4, 6,6} U{1,3,6,7,9} = 0

= {1,3,4,5,6,7,9}

ANB = 81,34. 5,6 } ñ \$ 1,3 5,9 } leroum 11 A. F Fropenly; = {1,3,5} 800 AM(8UC) ANS B-f A = { 13456} {1,3,5,7.93-{1,3,4,6} = {4,6} {7,9} 1  $A \oplus B = (A - B) \cup (B - A)$ = \{1,6} \| \ 7,9}  $= \{4,6,7,9\}$ (Answer)

7. A membership table. Son the distributive , property:

	1	+11	Pt —	ert —	<b>y</b> ;	2		{3,8,6}							
	A		B		10	2	BUC				ANB	Anc	CA	CANB)U(ANC)	
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7	)	0	,	0		(	)		0		0	Ô	1	0	
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Se.F.2.B (Answer)