Worksheet Exercise 4.2.C. Name _____

Symbolizing Complex Sentences Class _____ Date _____

Part B. Translate the following symbolic sentences into regular English sentences using the listed meanings for the predicate letters.

T = triangle,	F = figure,	C = circle,	E = three-sided,
S = square,	G = green,	U = four-sided,	B = blue,
M = matter,	O = solid,	t = Sears Tower,	c = Chicago

1. $(\forall x)(Tx \supset Fx)$ _____
2. $\sim(\forall x)(Fx \supset Tx)$ _____
3. $(\forall x)(Cx \supset \sim Ex)$ _____
4. $(\exists x)\sim(Sx \ \& \ Gx)$ _____
5. $(\exists x)(\sim Sx \ \& \ \sim Gx)$ _____
6. $(\exists x)[(Gx \ \& \ Sx) \ \& \ Ux]$ _____
7. $(\forall x)(Gx \ \& \ Sx \ \& \ Ux)$ _____
8. $(\forall x)[\ Tx \supset (Ex \ \& \ Fx)]$ _____
9. $(\forall x)[\ Tx \supset \sim(Ux \ \& \ Fx)]$ _____
10. $(\forall x)[\ Tx \supset (\sim Ux \ \& \ Fx)]$ _____
11. $\sim(\exists x)[(Ex \ \& \ Fx) \ \& \ Cx]$ _____
12. $(\forall x)Mx \ V \ (\forall x)\sim Mx$ _____
13. $(\forall x)(Ox \ \& \ Fx) \ \& \ (\exists x)\sim Mx$ _____
14. $Bt \supset (\exists x)[(Ox \ \& \ Fx) \ \& \ Bx]$ _____
15. $(\forall x)(Gx \ \& \ Sx) \supset Sc$ _____
16. $(\exists x)(Sx \ \&\sim Fx) \supset (\forall x)\sim Fx$ _____