## **Philosophy 240: Symbolic Logic** Fall 2011

Hamilton College Russell Marcus

## Predicate Logic Translation II Handout

- 1. All mice are purple. (Mx, Px)
- 2. No mice are purple.
- 3. Some mice are purple.
- 4. Some mice are not purple.
- 5. Snakes are reptiles. (Sx, Rx)
- 6. Snakes are not all poisonous. (Sx, Px)
- 7. Children are present. (Cx, Px)
- 8. Executives all have secretaries. (Ex, Sx)
- 9. Only executives have secretaries.
- 10. All that glitters is not gold. (Gx, Ax)
- 11. Nothing in the house escaped destruction. (Hx, Ex)
- 12. Blessed is he that considers the poor. (Bx, Cx)
- 13. Some students are intelligent and hard working. (Sx, Ix, Hx)
- 14. He that hates dissembles with his lips, and lays up deceit within him. (Hx, Dx, Lx)
- 15. Everything enjoyable is either illegal, immoral, or fattening. (Ex, Lx, Mx, Fx)

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16. Some medicines are dangerous if taken in excessive amounts. (Mx, Dx, Tx)

17. Some medicines are dangerous only if taken in excessive amounts.

18. Victorian houses are attractive (Vx, Hx, Ax)

19. Slow children are at play. (Sx, Cx, Px)

20. Any horse that is gentle has been well-trained. (Hx, Gx, Wx)

21. Only well-trained horses are gentle.

22. Only gentle horses have been well-trained.

23. A knowledgeable, inexpensive mechanic is hard to find. (Kx, Ex, Mx, Hx)

24. Dogs and cats chase birds and squirrels. (Dx, Cx, Bx, Sx)

25. If all survivors are women, then some women are fortunate. (Sx, Wx, Fx)

26. Some, but not all, of us got away. (Ux, Gx)

27. If all ripe bananas are yellow, then some yellow things are ripe. (Rx, Bx, Yx)

28. If any employees are lazy and some positions have no future, then some employees will not be successful. (Ex, Lx, Px, Fx, Sx)

29. No coat is waterproof unless it has been specially treated. (Cx, Wx, Sx)

30. A professor is a good lecturer if and only if he is both well-informed and entertaining. (Px, Gx, Wx, Ex)