

1. B 2. C 3. A 4. C 5. A 6. B

7. C 8. B 9. E 10. J

11. D 12. A 13. B 14. F

15. last column:	F	16. last column:	T
	F		F
	T		F
	F		T

17. If you did not fail the class, then you did not fail the final exam.

18. If you did not fail the final, then you did not fail the class.

19. If you failed the class, then you failed the final exam.

20. F 21. T 22. T

23. yes

24. No. This argument is not logically valid.

25. 15 26. 3 27. 5

28. 64 29. 14

30. {1, 2}

31. 30 32. 9 33. 47 34. 10

35. T 36. T 37. T 38. T

39. b 40. c 41. a 42. c 43. a

44.

45.

