

Chapter 6- Answers to even problems.

Section 6.1

42. $\det(B) = 3\det(A)$

44. $\det(B) = \det(A)$

48. $\det(kA) = k^n \det(A)$

52. Positive. Note that five 1000 are located at $a_{12}a_{24}a_{31}a_{45}a_{53}$. This patten has an even number of inversions and its value is 1000^5 . This dominates all other values of patterns in the determinant.

Section 6.2

2. -45

4. -324

10. -8

12. 8

14. 0

Section 6.3

22. $x = -2 \ y = 1$

24. $x = 1 \ y = 2 \ z = -1$.