

# Matrix Algebra Exercises

All the exercises are from Simon & Blume.

1. Exercise 8.1.
  2. Exercise 8.3.
  3. Exercise 8.5.
  4. Exercise 8.6.
  5. Exercise 8.8.
  6. Exercise 8.17.
  7. Exercise 8.19.
  8. Exercise 8.20.
  9. Exercise 8.22.
  10. One of the exercises 8.24-8.27.
  11. Exercise 8.28.
  12. Exercise 9.4.
  13. Exercise 9.7.
  14. Exercise 9.8.
  15. Exercise 9.9.
  16. Exercise 9.11.
  17. Exercise 9.13.
  18. Exercise 9.17.
19. Use the fact that  $|AB| = |A||B|$  to show that if  $A$  is invertible then

$$|A^{-1}| = \frac{1}{|A|}.$$

20. If you're still not all matrixed out, try any other exercises from chapters 8, 9 and 26 that take your fancy.