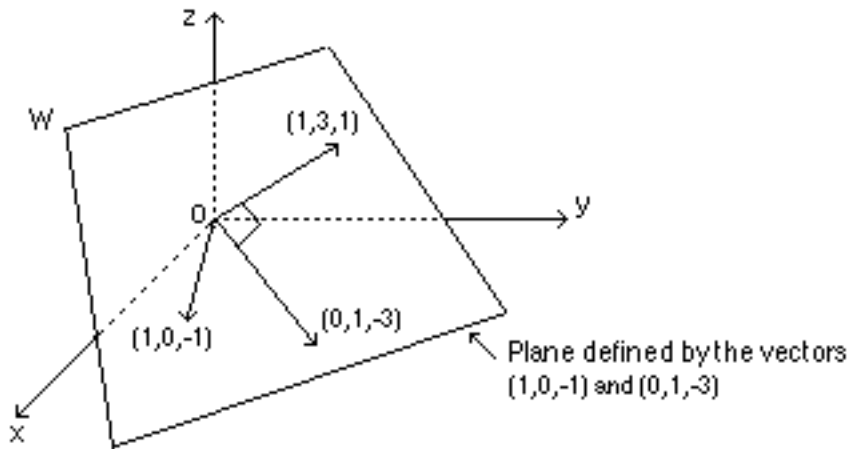


Errata for Williams Linear Algebra Edition 6, 2nd Printing.

- Page 32: Exercise 15, The 3rd equation should be $x_1 - 2x_2 + 4x_3 = 0$.
 (no negative in front of x_1)
- Page 33: 3/4 way down page, the equation should end "... + r(0, 0, 1) = **0**". (bold face **0**)
- Page 34: 2/3 way down the page, " $pv_1 + qv_2 + rv_3 = \mathbf{0} \dots$ ". (bold face **0**)
- Page 38: At end of both parts 4 of Properties, "... if and only if $\mathbf{u} = \mathbf{0}$." (bold face **0**)
- Page 44: Half way down the page, the denominator of the expression for $\cos \square$ should be $\|\mathbf{u}\| \|\mathbf{v}\|$. (second letter should be \mathbf{v} not \mathbf{u})
- Page 82: Exercise 12(a), "... + 7B² + ...". (the B is squared)
- Page 210: Line 12, should read "for which $z \neq 0$ cannot be ...".
- Page 360: In the definition, swap "an upper" and "a lower".
 (L stands for a lower triangular matrix, U for an upper triangular matrix.)
- Page 492: Exercise 13. " $(2r, -r, 4r, r) = r(2, -1, 4, 1)$." (the last component is 1)
 Also, " $\{(2, -1, 4, 1)\}$ is a basis." (insert last component 1)
- Page 497: Exercise 3(e). Should be "4 x 3".

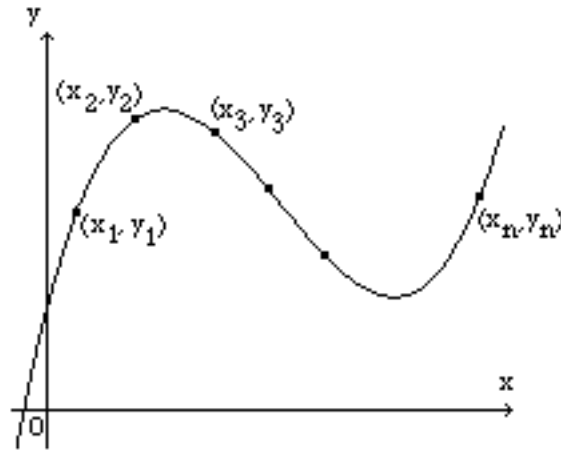
Errata for Williams Linear Algebra Edition 6, 1st Printing.

- Page 23: Exercise 10. The matrices should read $\begin{bmatrix} * \\ 0 \\ 0 \end{bmatrix}$ $\begin{bmatrix} * \\ 1 \\ * \end{bmatrix}$ $\begin{bmatrix} * \\ 0 \\ 1 \end{bmatrix}$ $\begin{bmatrix} * \\ 0 \\ 0 \end{bmatrix}$.
 (* corresponds to possible nonzero element.)
- Page 32: Exercise 15, The 3rd equation should be $x_1 - 2x_2 + 4x_3 = 0$.
 (no negative in front of x_1)
- Page 33: 3/4 way down page, the equation should end "... + r(0, 0, 1) = **0**". (bold face **0**)
- Page 34: 2/3 way down the page, " $pv_1 + qv_2 + rv_3 = \mathbf{0} \dots$ ". (bold face **0**)
- Page 38: At end of both parts 4 of Properties, "... if and only if $\mathbf{u} = \mathbf{0}$." (bold face **0**)
- Page 39: Caption for Figure 1.17 should read "Norm of vector (u_1, u_2) is $\sqrt{(u_1)^2 + (u_2)^2}$."
- Page 42: Figure 1.19 should be



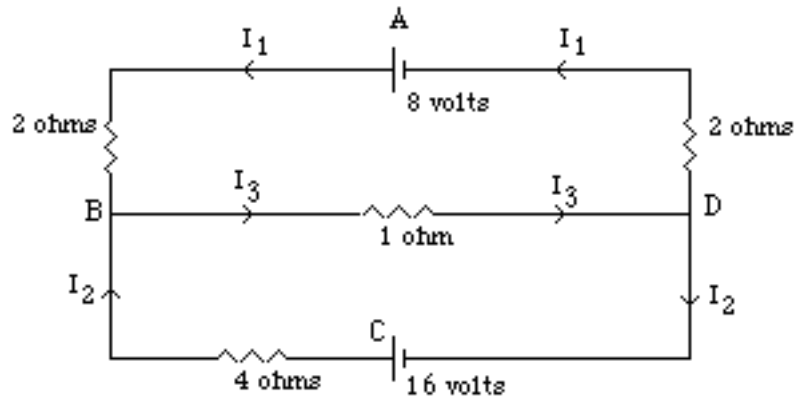
Page 44: Half way down the page, the denominator of the expression for $\cos \theta$ should be $\|u\| \|v\|$. (second letter should be v not u)

Page 49: Figure 1.22 should be

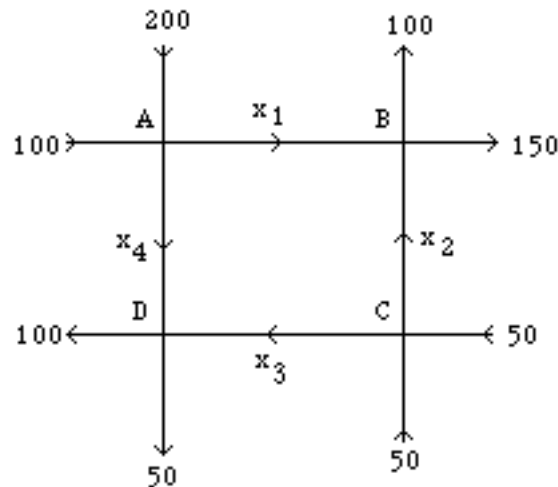


Fitting a graph to data points

Page 51: Figure 1.24 should be



Page 56: Figure 1.28 should be



Page 65: Example 1, should read

$$AB = \dots = \begin{bmatrix} 3 & 1 & 2 \\ 4 & 1 & 5 \end{bmatrix} \begin{bmatrix} 7 \\ 6 \end{bmatrix} = \begin{bmatrix} 3 & 1 & 2 \\ 4 & 1 & 5 \end{bmatrix} \begin{bmatrix} 2 \\ 3 \end{bmatrix}$$

Page 82: Exercise 12(a), "... + 7B² + ...". (the B is squared)

Page 114: Half way down the page in the line " $\|T(\mathbf{u})\| = \dots$ ", and the following line, all the "u" should be boldface.

Page 117: Exercise 7. The ellipse should be $\frac{x^2}{4} + \frac{y^2}{9} = 1$.

Page 118: Exercise 21. The reference is to Figure 2.18.

Page 123: Figure 2.22. The second figure should be labelled (b).

Page 152; Exercise 10 should read "Find A such that $3A^{-1} = \begin{bmatrix} 5 & 6 \\ 2 & 3 \end{bmatrix}$ ".

Page 210: Line 12, should read "for which $z \neq 0$ cannot be ...".

Page 220: Last sentence in part (a) of the proof should read

"There is thus only one way of expressing \mathbf{v} as a linear combination of $\mathbf{v}_1, \dots, \mathbf{v}_n$."

Page 238: The reference at the bottom of the page is to Section 1.5.

Page 253: Figure 4.15. The caption should be $T(x, y, z) = (x, y, 0)$.

Page 360: In the definition, swap "an upper" and "a lower".

i.e. L stands for a lower triangular matrix, U for an upper triangular matrix.

Page 492: Exercise 13. " $(2r, -r, 4r, r) = r(2, -1, 4, 1)$." (the last component is 1)

Also, " $\{(2, -1, 4, 1)\}$ is a basis." (insert last component 1)

Page 497: Exercise 3(e). Should be "4 x 3".

Page 499: Exercise 22. Should be (5, 1).

Page 510: Exercise 1(e). Should be "... + b(1, -2, 1) + ...".