

Corrections to the notes

(Thanks for Alexandra Tcheng and David Kawrykow for pointing out typos)

Page	Line	Should read
25	2-4	$T\left(\sum_{i=1}^{r-1} \beta_i w_i - w_r\right) = 0.$ <p>Thus, $\sum_{i=1}^{r-1} \beta_i w_i - w_r$ is in $\text{Ker}(T)$ and so there are α_i such that</p> $\sum_{i=1}^{r-1} \beta_i w_i - w_r - \sum_{i=1}^n \alpha_i v_i = 0.$ <p>This is a linear dependence between elements of the basis B and hence gives a contradiction.</p>
25	-4	We already know...
28	13	§10.2 (Instead of ??)
38	1-5	<p>However, $0 = \det(v_1 v_2 \dots (v_i + v_j) \dots (v_i + v_j) \dots v_n) =$ $\det(v_1 v_2 \dots v_i \dots v_i \dots v_n) + \det(v_1 v_2 \dots v_j \dots v_j \dots v_n) +$ $\det(v_1 v_2 \dots v_i \dots v_j \dots v_n) + \det(v_1 v_2 \dots v_j \dots v_i \dots v_n) =$ $\det(v_1 v_2 \dots v_i \dots v_j \dots v_n) + \det(v_1 v_2 \dots v_j \dots v_i \dots v_n).$</p>
55	-5	$a_{11}x_1 + \dots + a_{1n}x_n = b_1$ \vdots $a_{n1}x_1 + \dots + a_{nn}x_n = b_n$
68	12	$s'_{k+1} = s_{k+1} - \sum_{i=1}^k \langle s_{k+1}, v_i \rangle \cdot v_i, \quad v_{k+1} = \frac{s'_{k+1}}{\ s'_{k+1}\ }.$
70	-3	Let us consider linear equations again: Suppose that we have m linear equations over \mathbb{R} in n variables:
78	-2	Apply S to get
87	18	<p>Write</p> $m_T(t) = (f_1(t)^{n_1} \dots f_r(t)^{n_r}) \cdot f_{r+1}(t)^{n_{r+1}}$
101	-3	<p>Let C be any basis for V and let $A \in M_n(\mathbb{R})$ be a real symmetric matrix. Then</p> $[v, w] = {}^t[v]_C A [w]_C,$ <p>is a bilinear form.</p>