



David Eisenbud <de@berkeley.edu>

Chapter 17

1 message

Izzet Coskun <coskunizzet@gmail.com>

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To: Joe Harris <harris@math.harvard.edu>, David Eisenbud <de@berkeley.edu>

Dear Joe and David,

Here are some thoughts on Chapter 17. Happy Thanksgiving!

Best, Izzet

page 320, the paragraph starting 'To construct this, ..', should it be $\beta_{0,j}$ generators of degree j ?

page 321, first sentence of 17.2, broken reference

page 321, first sentence of 17.2.1, maybe better 'can be transformed by row and column operations'

When you use the word respectively, I was taught that it should be preceded by a comma if the word is at the end of the sentence and preceded and followed by a comma if it occurs in the middle of the sentence. Not that this makes much sense...

I would write, 'a, b and c, respectively.'

or 'a, respectively, b have ...'

You often do not put commas in the book. You might want to check with the relevant editor. I have not been pointing these out. If you decide to make a change, you would have to search for 'respectively' and add commas as necessary.

page 323, line 1, $(j-i)$ -th row

page 322, 323, should betti table be Betti table?

page 324, 1st sentence of 17.3, should it be 'an' M -regular sequence

page 324, last sentence of 1st paragraph of 17.3, you should have one of 'any' or 'all'. I might say that M is a module over the polynomial ring (or a CM ring) somewhere in the paragraph

page 325, does one capitalize Artinian?

page 325, paragraph above 17.3.1, line 3, a period between CM and From instead of a comma

page 326, 3 lines before 17.4, missing $)$ in $H^0(\mathcal{O}_C(1))$

page 326, 1st sentence of 2nd paragraph of 17.4, better to say 'We are interested in the EN because it influences the shape of the free resolution ...'

page 328, line 17 of proof of 17.4.1, better to say 'Since grade $f \geq 1$, we can find a nonzero divisor...'page 328, line 21 of proof of 17.4.1, missing $($ in $I(\Delta_1)$ page 331, line 7 of proof of 17.4.5, should it be $I = I_1(\alpha)$?page 332, 2nd paragraph of 17.4.2, is there a switch in the order Δ_1 and Δ_2 in the latter half of the paragraph?page 332, 3rd paragraph, better to have $\left(\right)$ in the square of the element

page 333, line 7, the reference to Eisenbud seems incomplete

page 33, line -8, don't you usually place the name of your maps above the arrow? Here Δ_1 is below the arrow, in case you care

page 334, line 4, do you want a \rightarrow after the first term in the sequence ($*_j$)

page 334, line 8, are you missing a G^* in the first term and should j be q in the second term? Do you need some duals?

page 335, line 7 of 17.5, an extra 'scroll' in 2-dimensional scroll rational normal scroll, also it may look better to write 1-generic 2×2 matrix

page 335, paragraph describing plane quintic $g=6$ curves, should the subscripts in the multiplication map be P^2 instead of P^1

page 337, do you capitalize Pfaffians?

page 338, is Aprodu really the simplest proof or is Kemeny's proof simpler?

You need to add the tables in 17.5.1, but you are aware of this already

page 339, exercise 17.6.1, this exercise starts with a sentence fragment, also in the exact sequence in the hint there is a typo

page 339, broken reference in exercise 17.6.3

page 340, 17.6.9 (1) transposeq?

There is a broken reference in the hint of 17.6.9

page 340, do you want to capitalize the first word of 17.6.10?

You are not always consistent with hyphenating nonzerodivisor. In most of the section, it was non-zerodivisor. In exercise, 17.6.10 it is not hyphenated. I think there were a few times in the section when this was not consistent. Better to search and replace