

Math 523 Additional Information, Fall 2018; CRN 12245

Composition of final mark:

Homework	Midterm 1	Midterm 2	Midterm 3	Paper
45	15	15	15	10

Paper: A ± 8 -page paper, **typed in LaTeX, 12 point font**, on *Vizing's conjecture on the domination number of the Cartesian product of graphs*, is due on **December 10**. Both a LaTeX file and a pdf file must be emailed to me (kieka@uvic.ca) **before noon** on the due date. Marks will be given for content (7), exposition (2) and the correct use of LaTeX (1).

Instructions

1. State the conjecture and cite the paper where Vizing made the conjecture.
2. Mention classes of graphs and values of domination numbers for which the conjecture has been proved (include citations).
3. Show that if true, the result (as stated in the conjecture) would be best possible. That is, give infinite classes of graphs for which equality holds in Vizing's bound. Again, include citations.
4. Give classes of graphs for which the bound is a weak bound.
5. Conclude with a list of references. In the text, give citations to items in the list, don't repeat the entire publication.