

Discrete and Algorithmic Geometry

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Sheet 2

due on Monday, November 18, 2013

READING

(1)

WRITING

- (1) Show that all induced cycles of length 3, 4 and 5 in the graph of a simple d -polytope P are graphs of 2-faces of P .

(*Hint for 5-cycles:* First show this for $d = 3$, then prove that any 5-cycle in a simple polytope is contained in some 3-face, and use that a face of a simple polytope is simple.)

SOFTWARE

(1)