7. Notes.

General.

At present there seems to be no systematic formal introduction to geometric group theory as such, though the key ideas with many interesting examples are described in de la Harpe's book [Harp]. The fundamental notions are also described in [BriH]. Earlier, more traditional treatments of combinatorial group theory are [MagKS] and [LS]. A list of open problems in geometric group theory can be found in [Bes3].

The theory of non-positively curved spaces grew out of work of Aleksandrov, Toponogov, Busemann and more recently, Gromov. The standard introductory text is [BriH].

7.0. Section 0 :

An overview of basic "small cancellation" theory can be found in Strebel's appendix to [GhH]. The paper [ScW] was influential in the introduction of topological ideas into group theory. The works of Stallings and Dunwoody were influential in introducing methods from 3-manifold theory — see the notes on Section 3. Thurston gave an outline of his geometrisation programme in [Th].

7.1. Section 1 :

The basic material of most of this section is standard. More detailed accounts can be found in [MagKS] and [LS]. One important result that illustrates the power of combinatorial methods is Higman's embedding theorem [Hi] (see also [LS]).

A geometrical picture of the Heisenberg group is described in [GhH].

A brief survey of the Andews-Curtis conjecture can be found in [BuM].

7.2. Section 2 :

Again, much of this material can be found in [MagKS], [LS] and other introductory texts.