Exercises for "Helly graphs and groups"

Masterclass "Topics in Geometric Group Theory"
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List 2

(1) Show that median graphs are bipartite.
(2) Show that the gated amalgam (that is, gluing by identifying gated subsets) of two median graphs is median.
(3) Show that a graph obtained from two Helly graphs by identifying (gluing along) a single vertex is Helly.
(4) Show that the strong product of two Helly graphs is Helly.
(5) Show that a Rips graph of a Helly graph is Helly.
(6) Show that the thickening of a median graph is Helly.
(7) Which subsets of Helly graphs can be gated?
(8) Show that weakly modular complexes have at most quadratic isoperimetric function.
(9) Show that weakly modular graphs have 1-stable intervals.