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September 11, 2016

Definition 1 (One-sided segment)**.** *We call a maximal segment one-sided if it is side of only one rectangle.*

Definition 2 (One-sided drawing)**.** *We call a drawing one-sided if all its maximal segments are one-side.*

Definition 3 (Horizontalliy (resp. vertically) one-sided drawing)**.** *We call a drawing Horizontally (resp. vertically) one-sided if all its Horizontal (resp. vertical) maximal segments are one-side.*

NOt yet defined -left-altheranting (right) cycle -flipping a 4cycle

Claim 1. *Every graph G admits a drawing that is vertically one-sided and another drawing that is vertically one-sided*

This claim is true, we will show it holds for the vertically one-sided case. But the same proof holds for the horizontally onesided case.

suppose we have a rectangular dual of any graph G that is not yet vertically one-sided. Then we have a maximal vertical segment that is incident to horizontal segments on both sides. Hence there is a place on this vertical segment where a indince to a segment on one side neighbours to a incident to a segment on the other side. Hence one of the two cases in figure **??** must occur. We can then flip the alternating 4-cylce, to remove this spot of non vertical one-sidedness. When we repeat this we will end up with a vertical one-sided graph.

Claim 2. *For every graph G it holds that the horizontally/vertically one-sided segment is the maximal/minimal element in the distributive lattice.*

This claim is false. Consider the graph in figure 2. The rectangular dual corresponding to this graph is vertically one-sided. But this graph contains both left and right-alternating cycles.

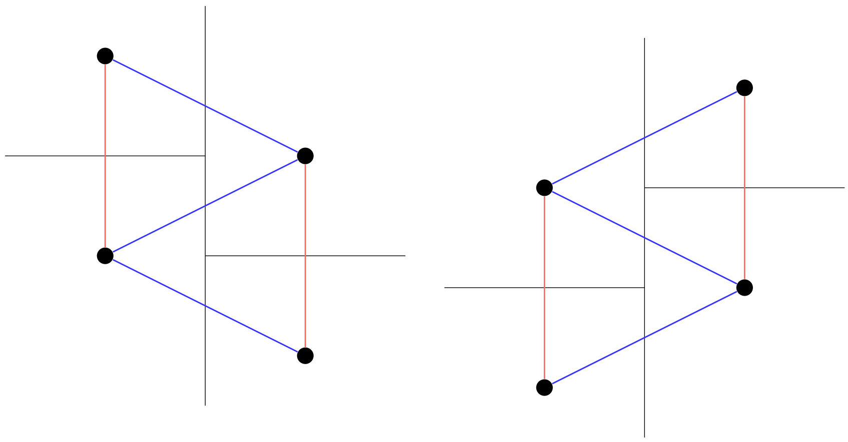

Figure 1: The two cases of Claim 1

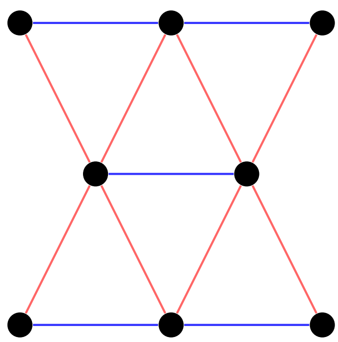

Figure 2: •