Drawing Graphs

with

Vertices at Specified Positions

and

Crossings at Large Angles

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Point-Set Embeddability (PSE)
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Large Crossing Angles
Point-Set Embeddability (PSE)

graph

point set

Large Crossing Angles
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Large Crossing Angles
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Large Crossing Angles

crossing angle $\beta$:
$\beta = 90^\circ$: RAC drawing
$\beta \geq \alpha$: $\alpha$AC drawing
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Large Crossing Angles

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Large Crossing Angles

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RAC PSE

$\alpha$AC PSE
Restricted $\text{RAC}_2$ embeddings

- edges on grid lines
- $\leq 2$ bends per edge

maxdeg-2 graph