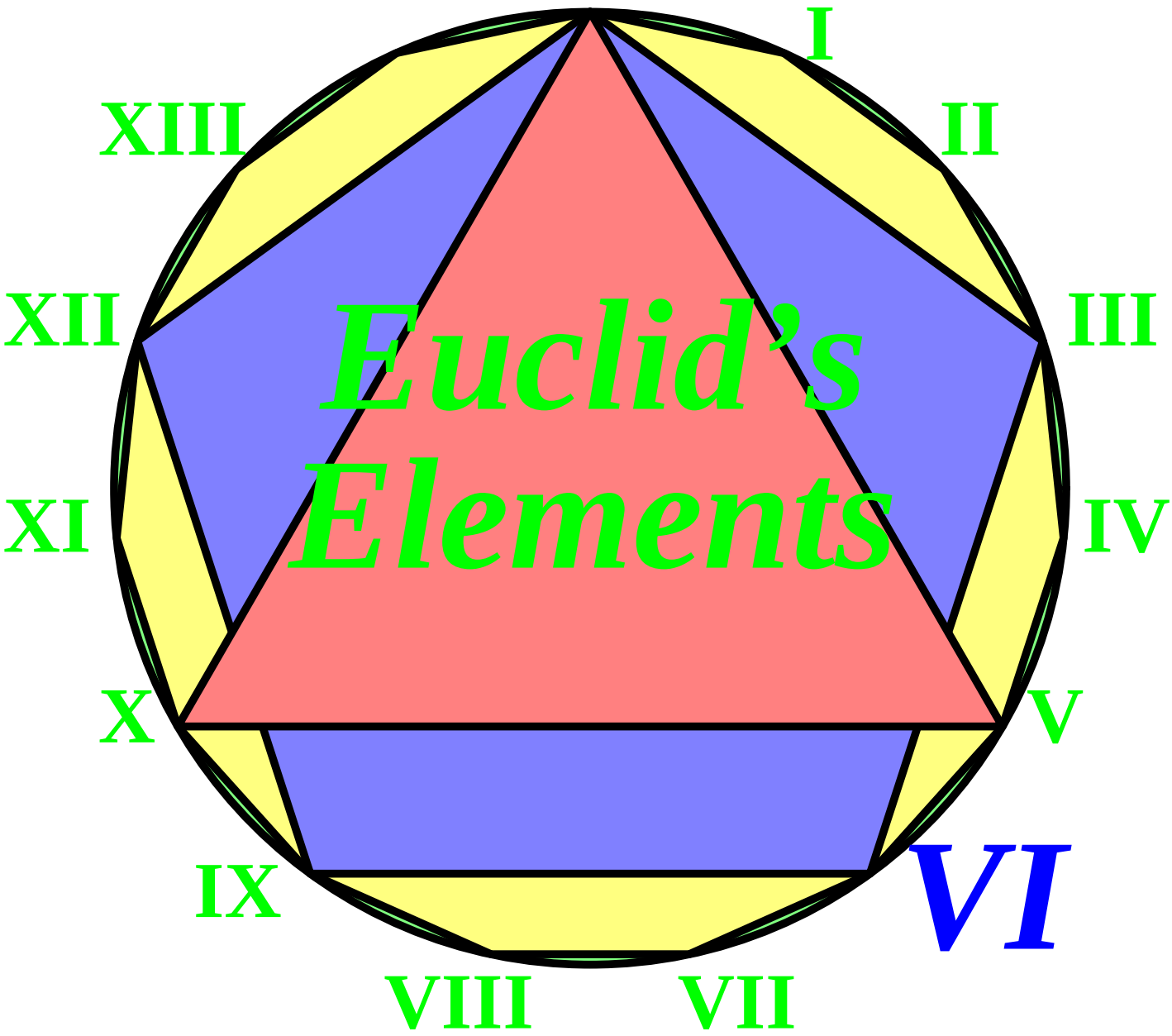
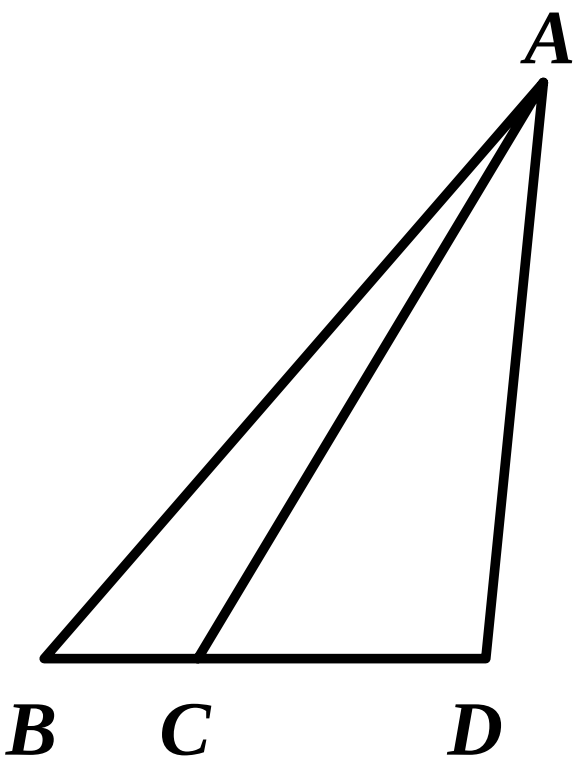


Book VI
Proposition 1

By William Pang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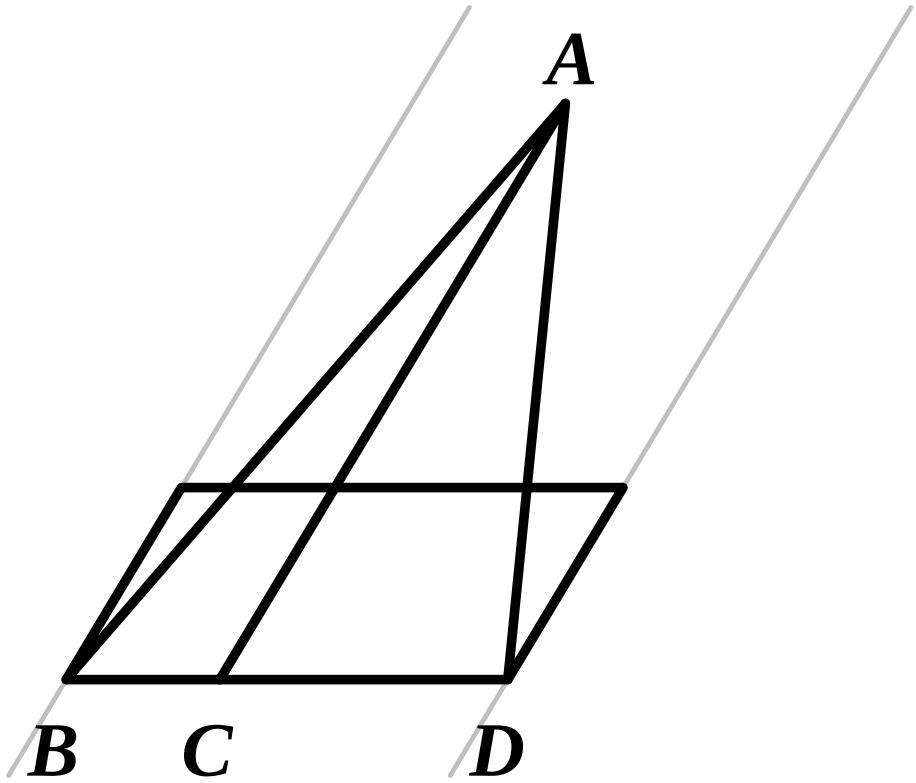
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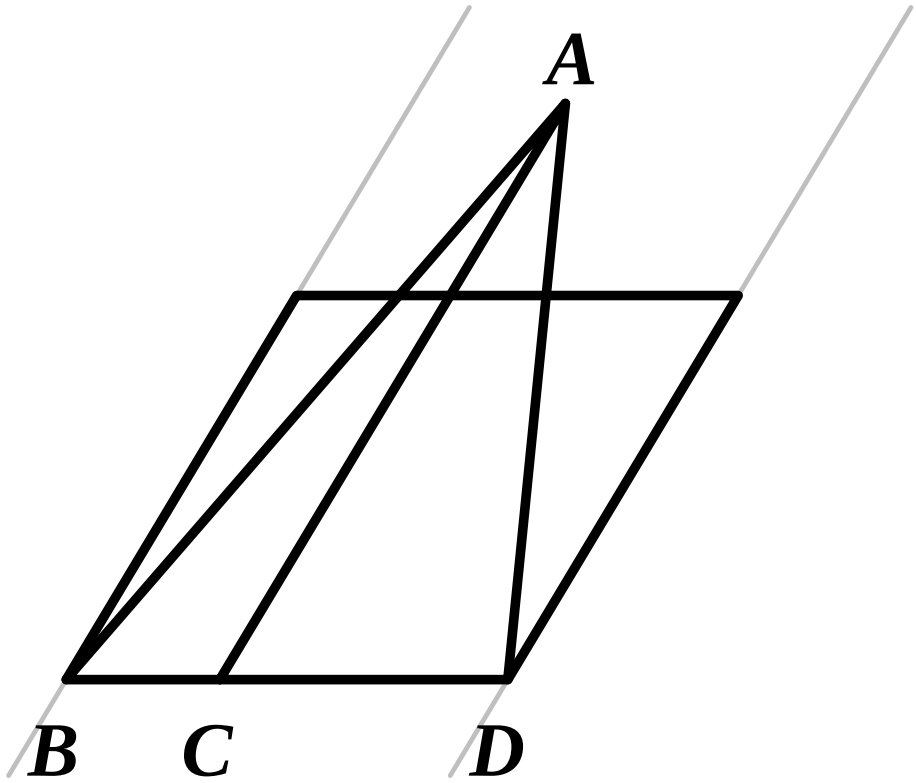
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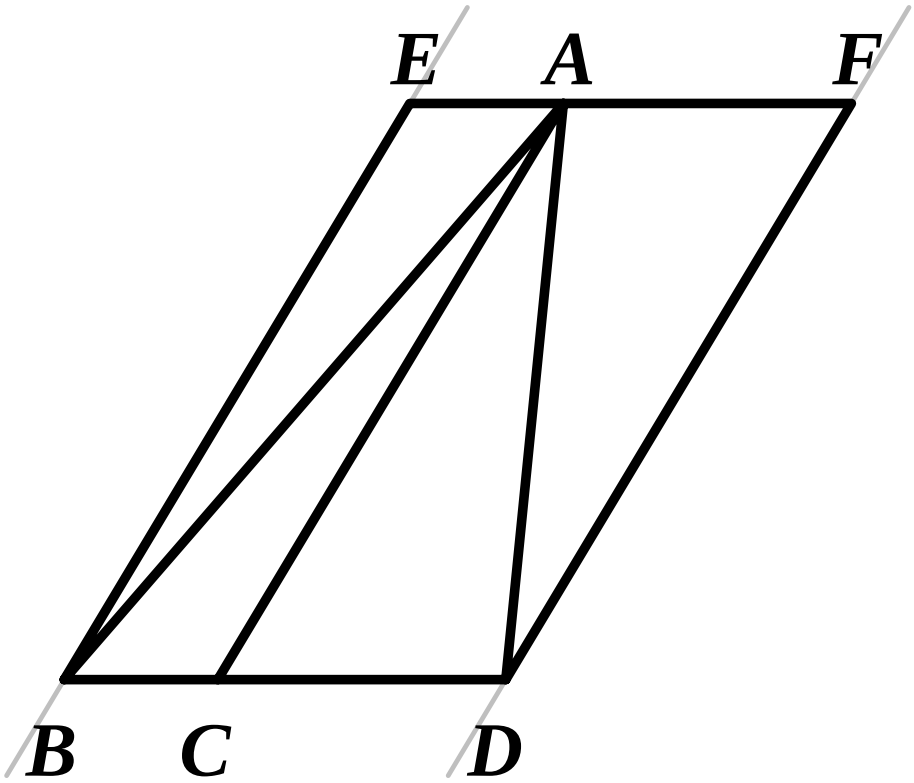
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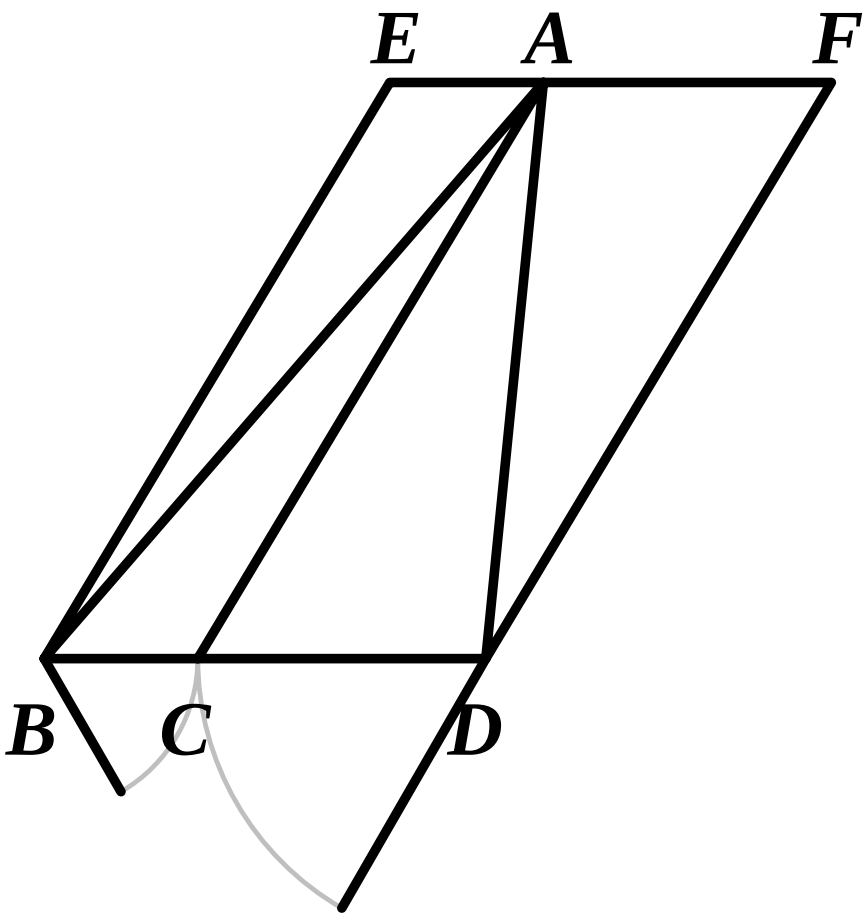
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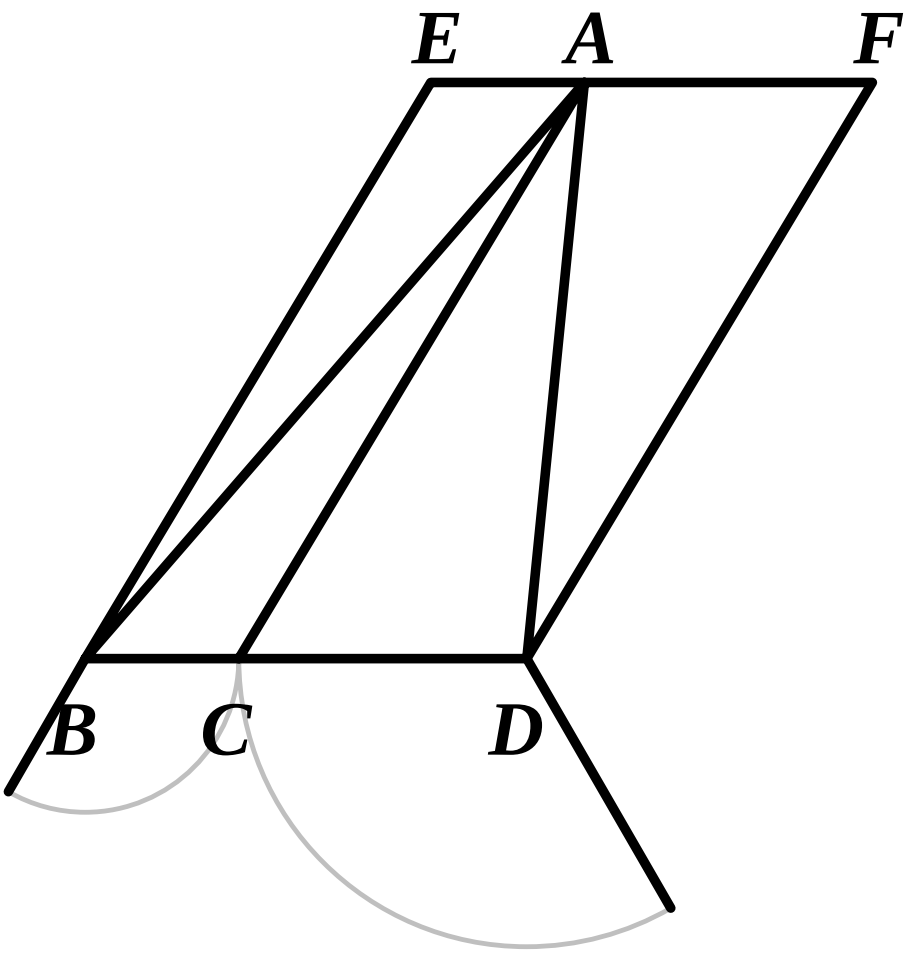
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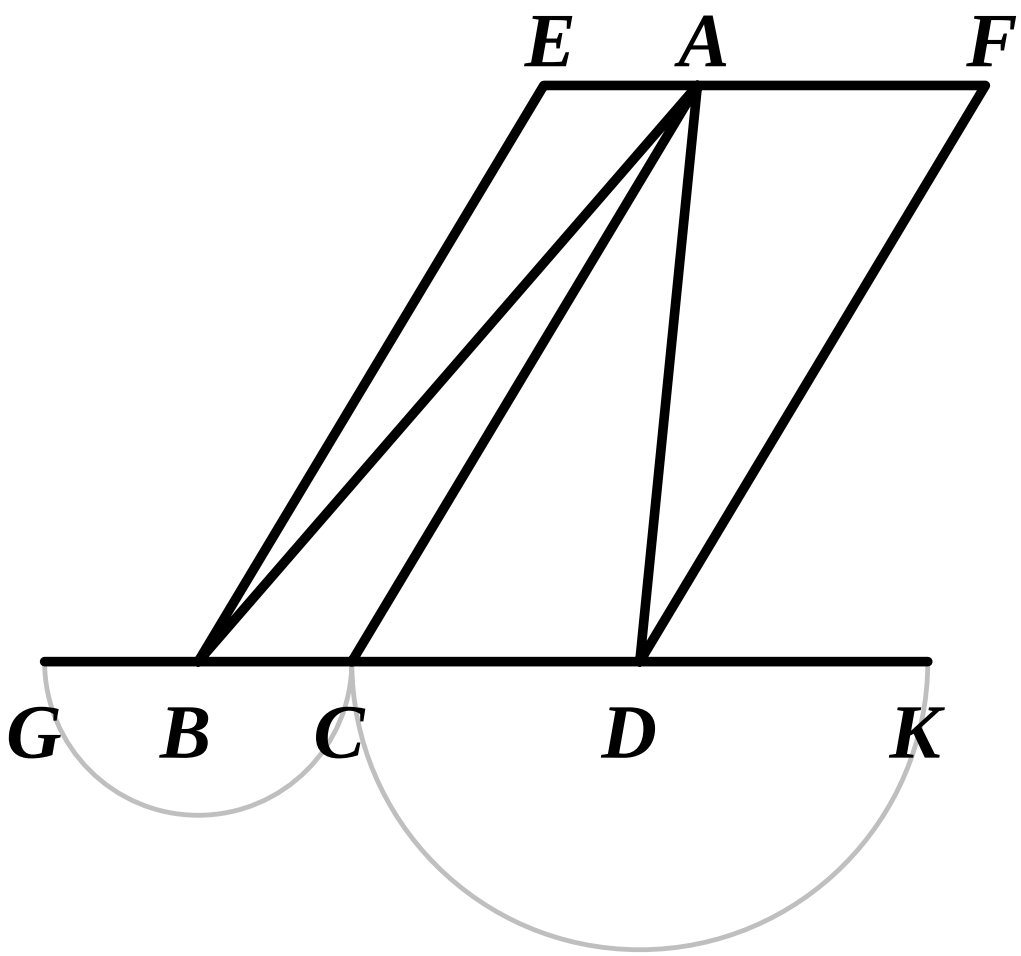
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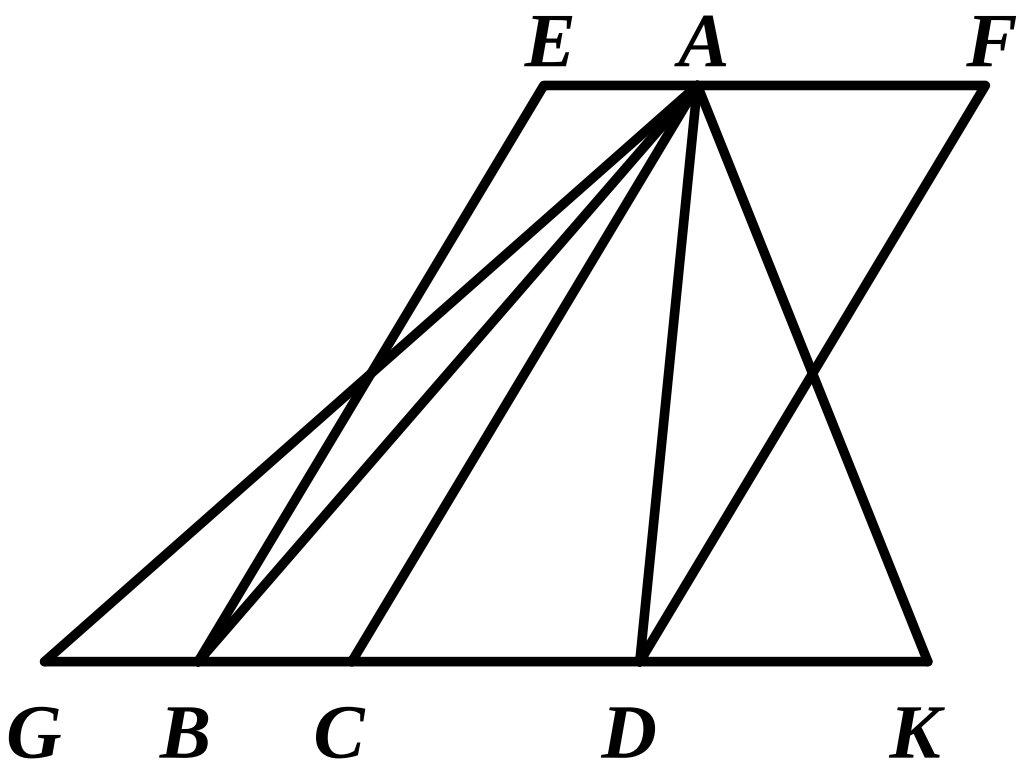
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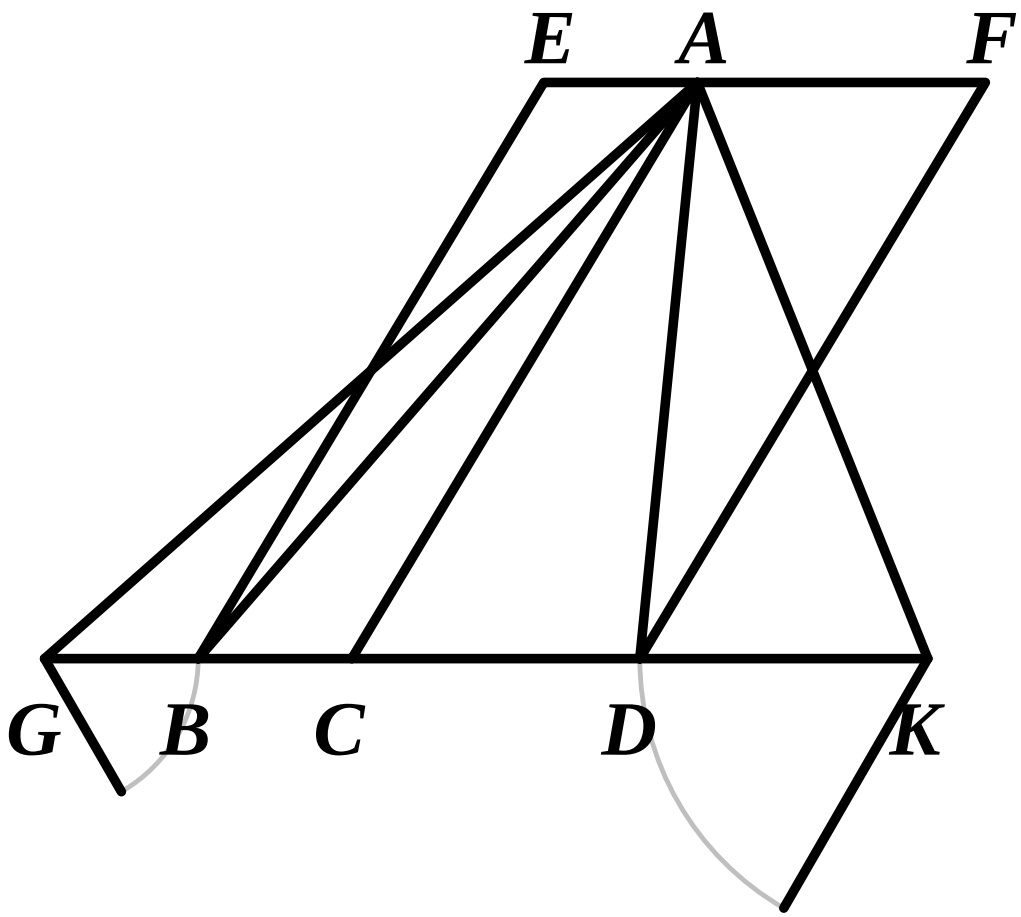
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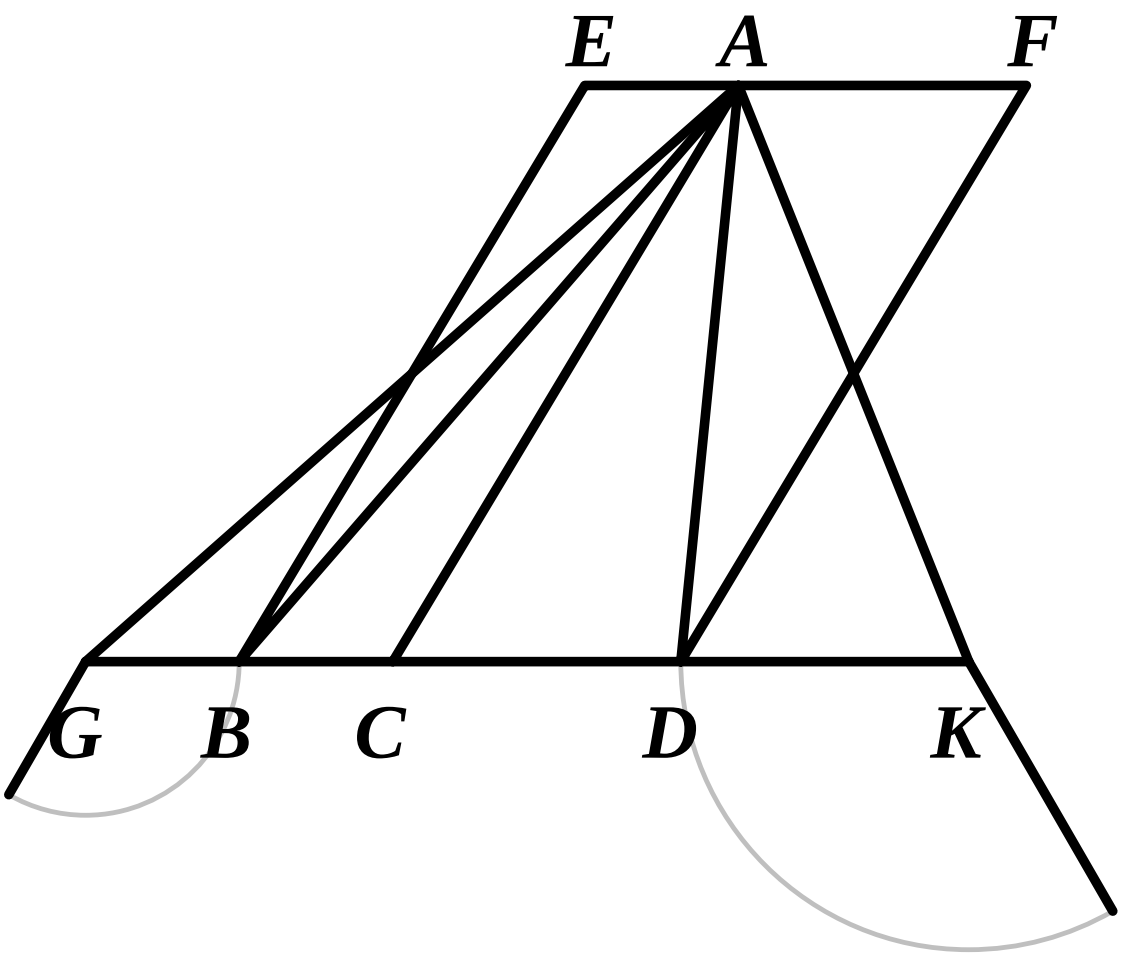
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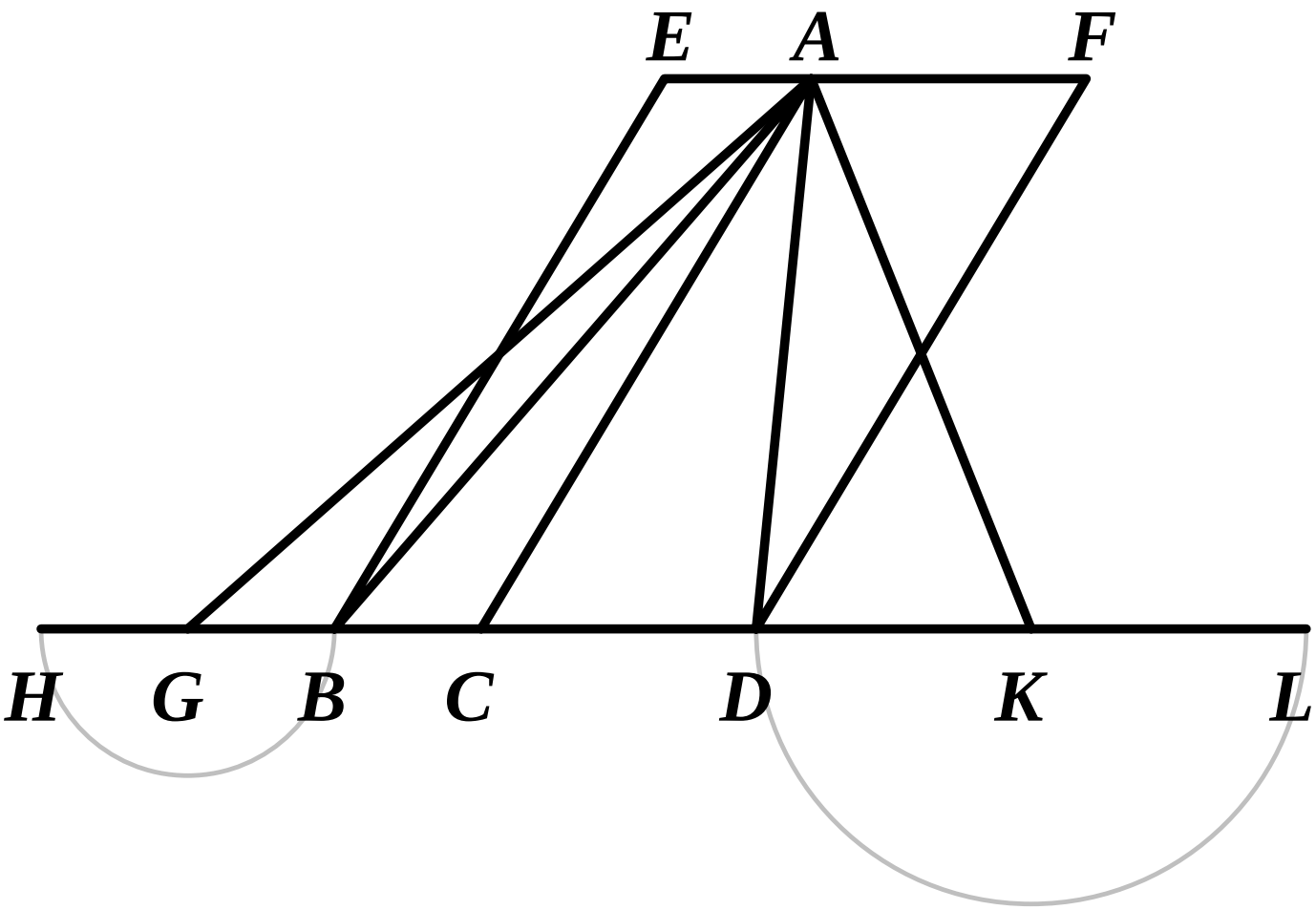
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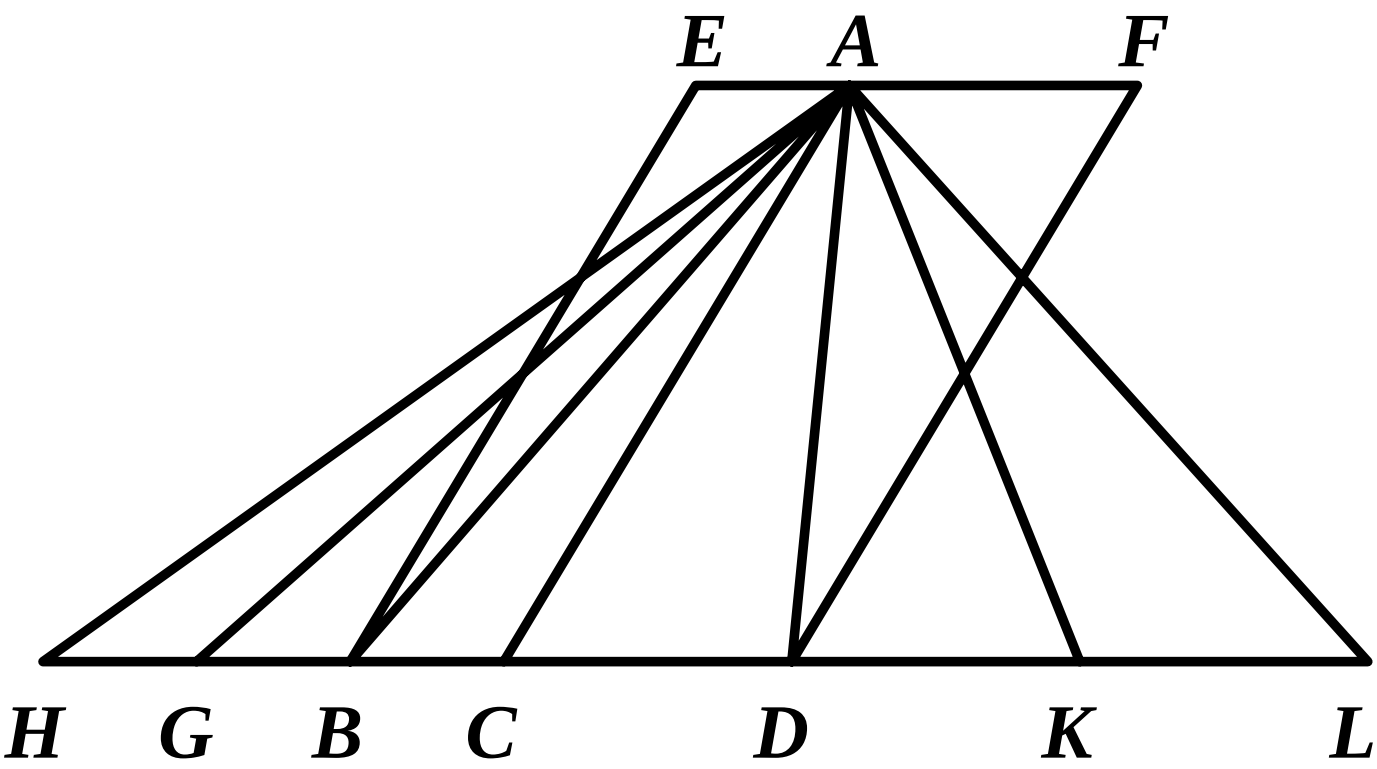
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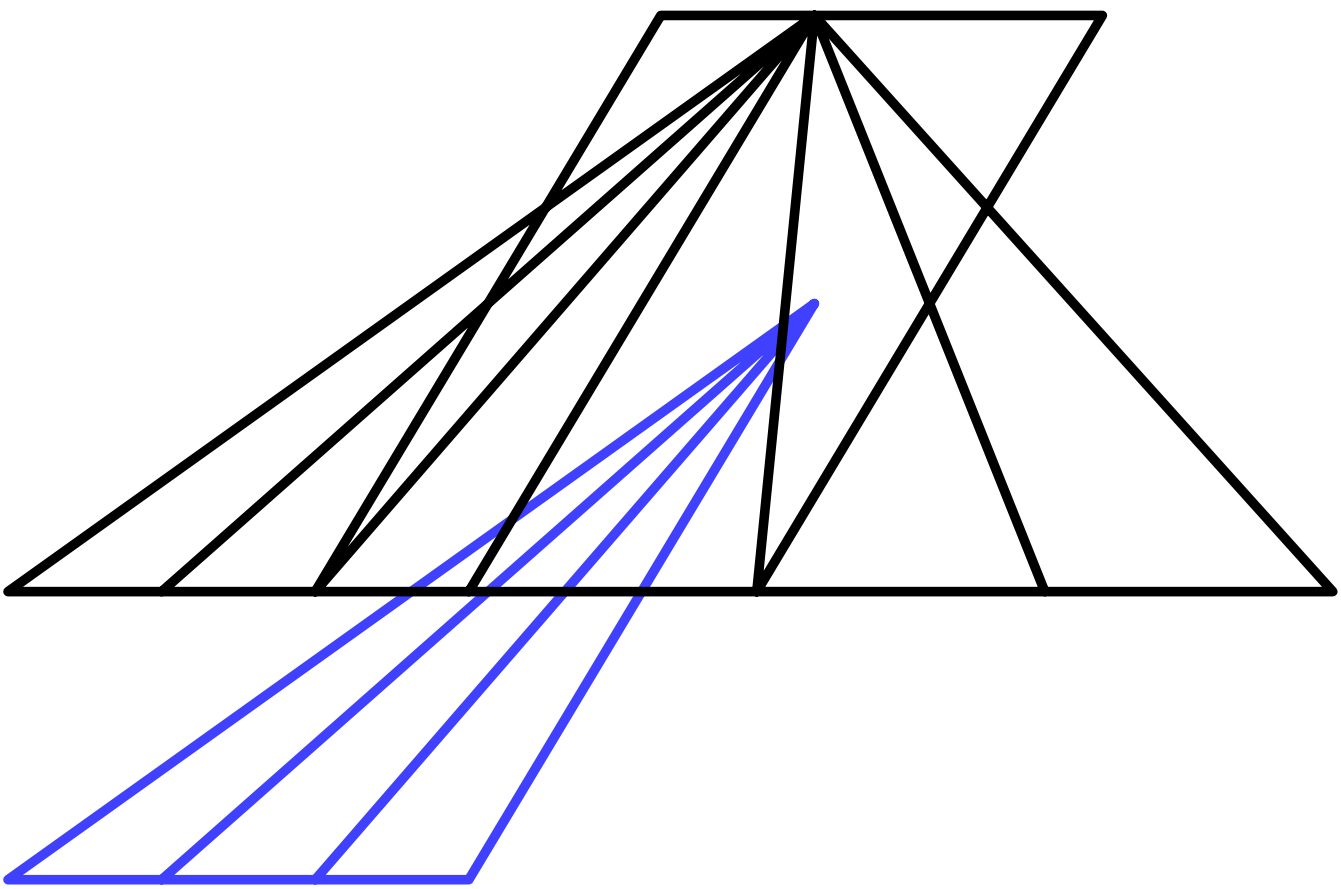

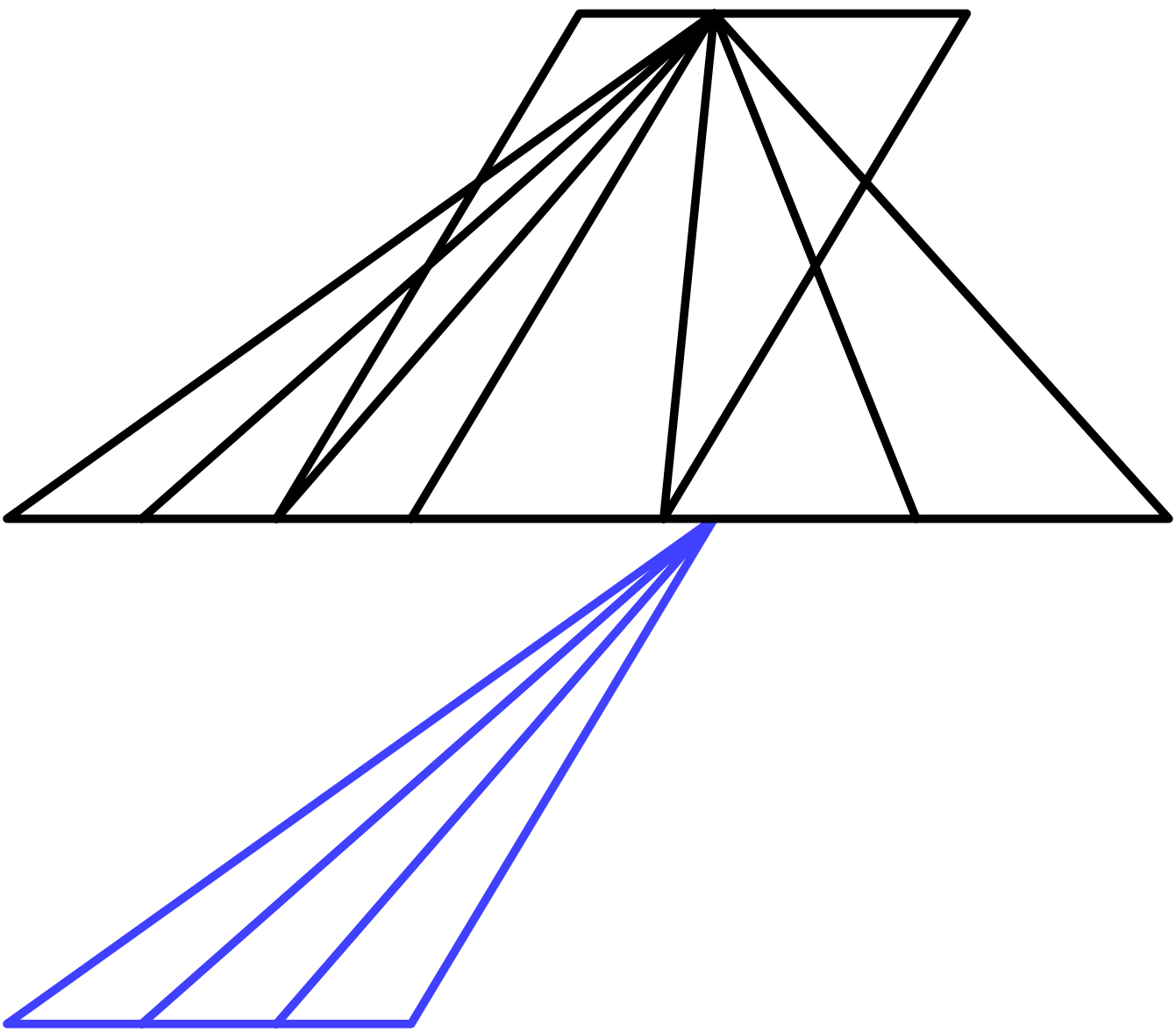

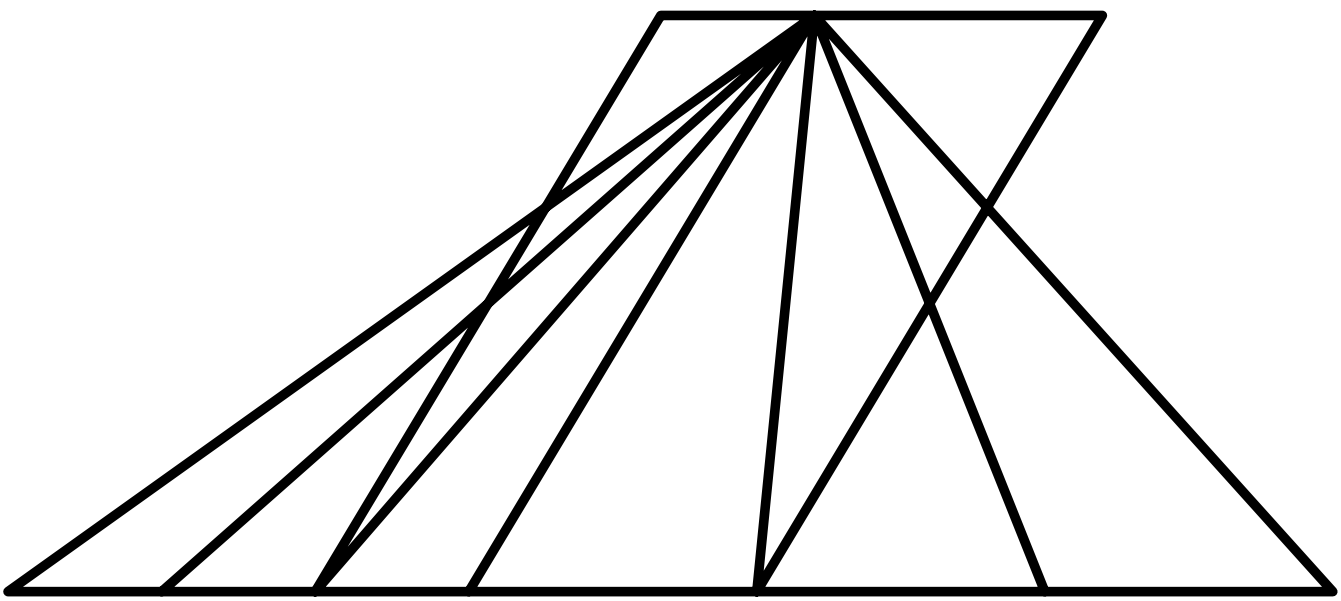

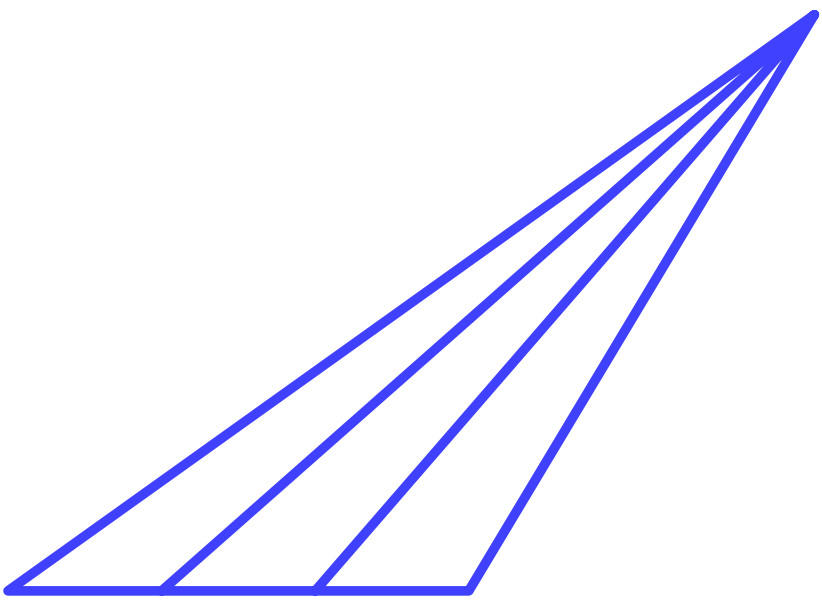

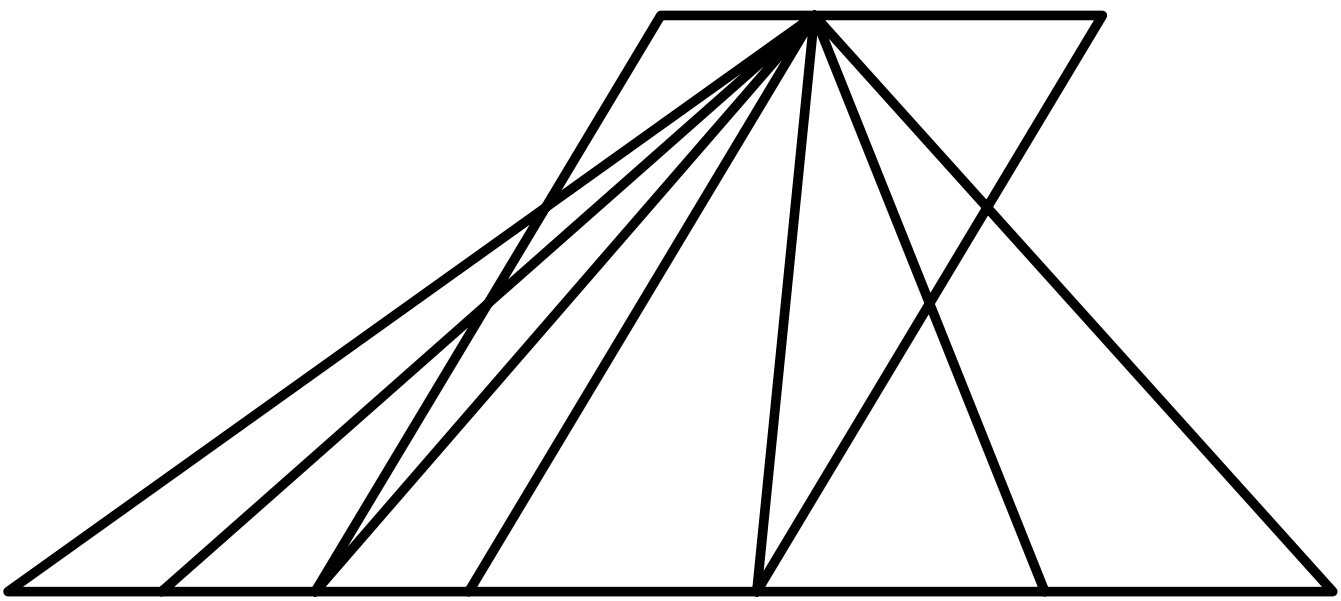

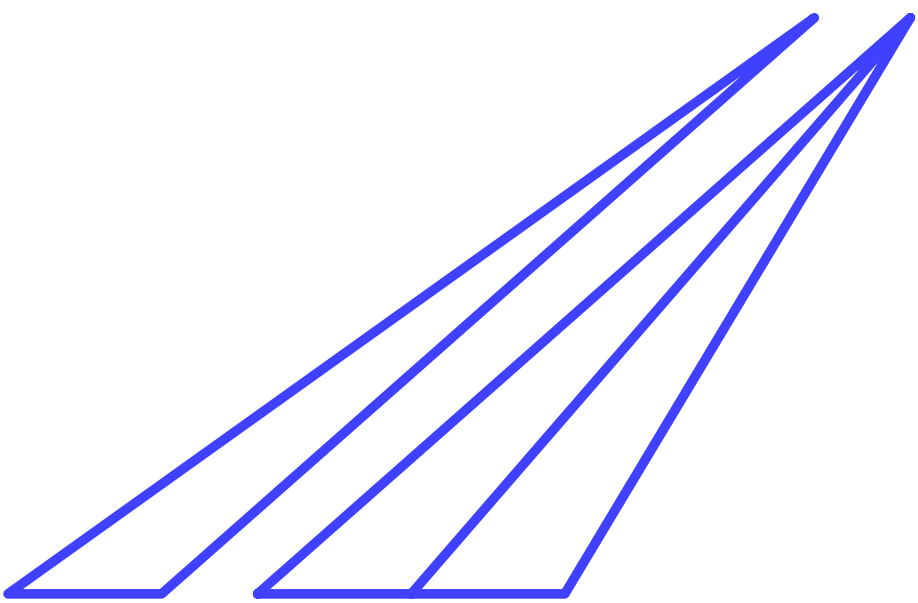

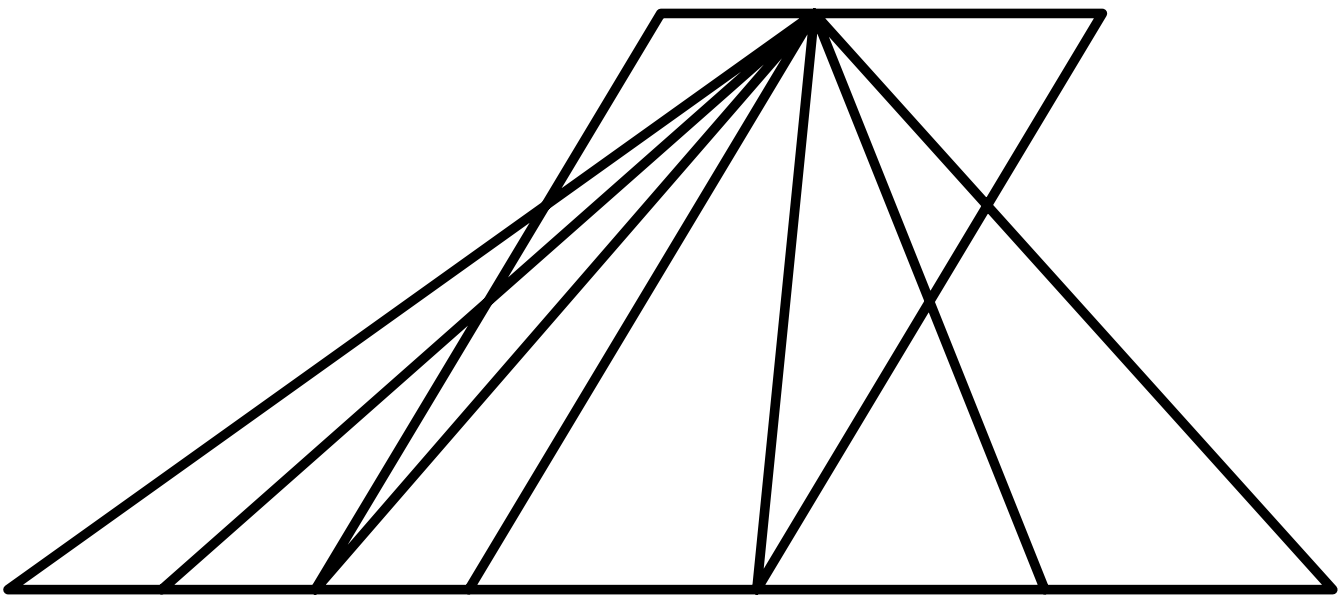

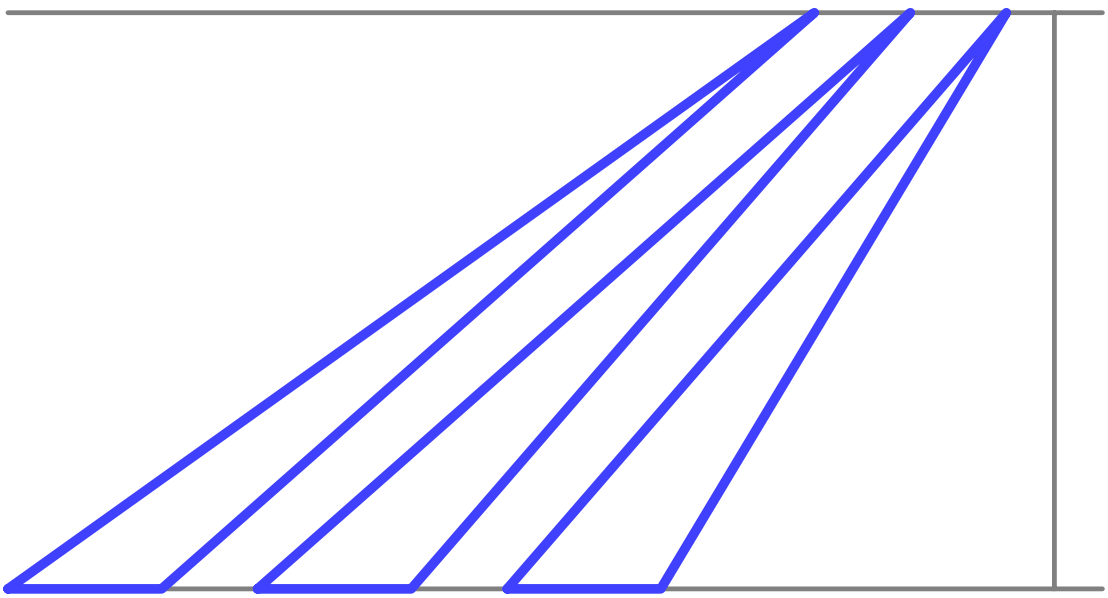

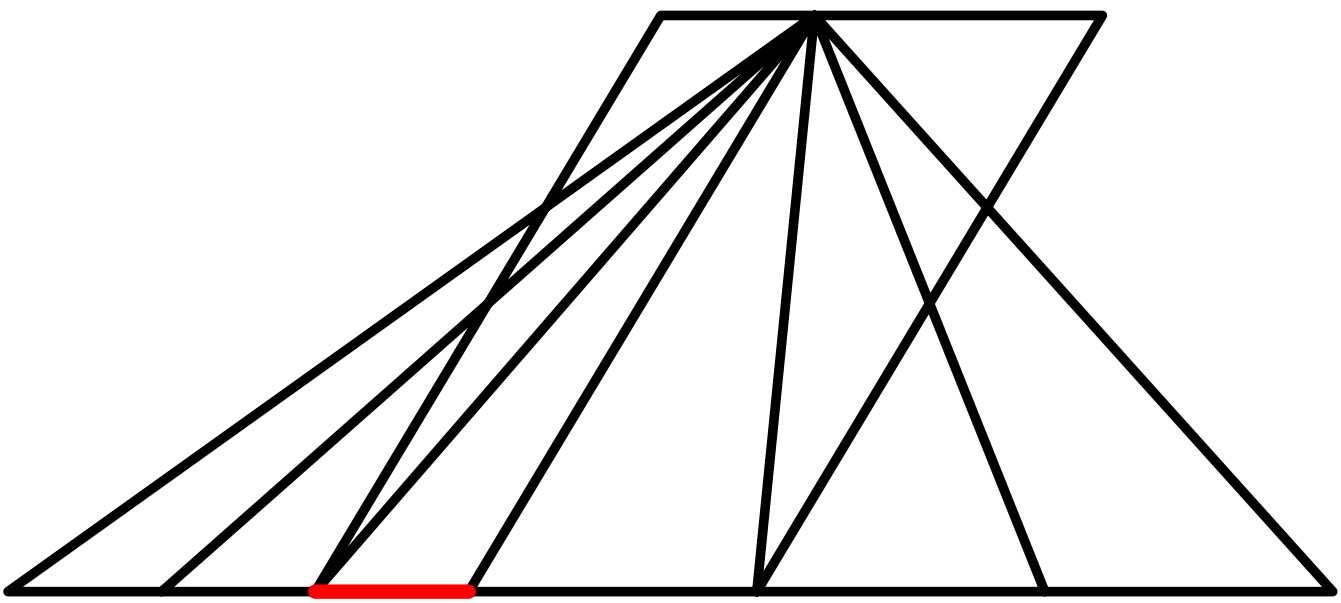

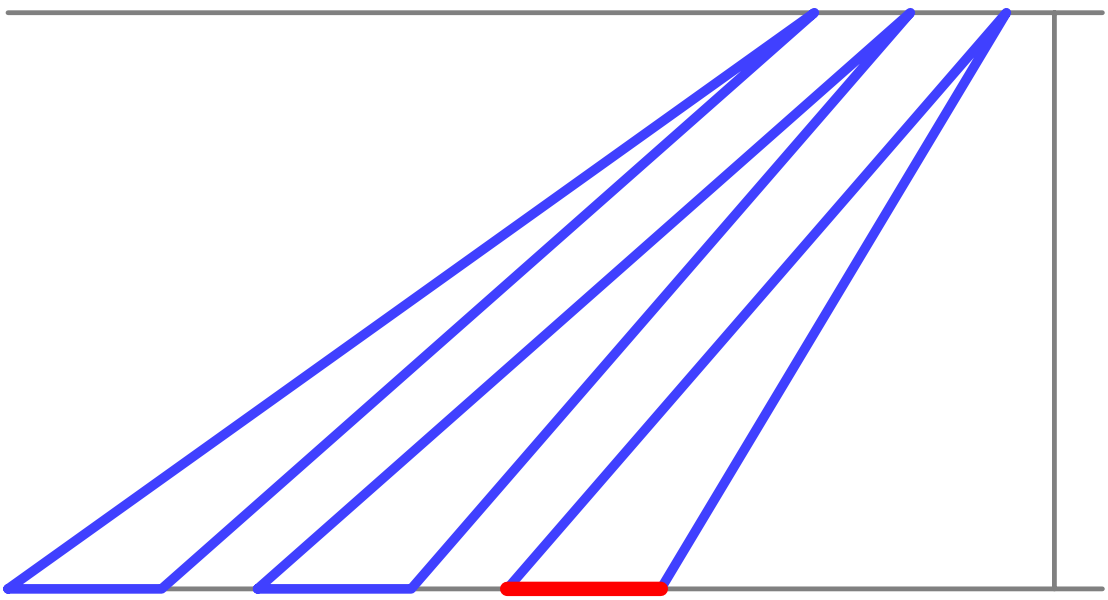

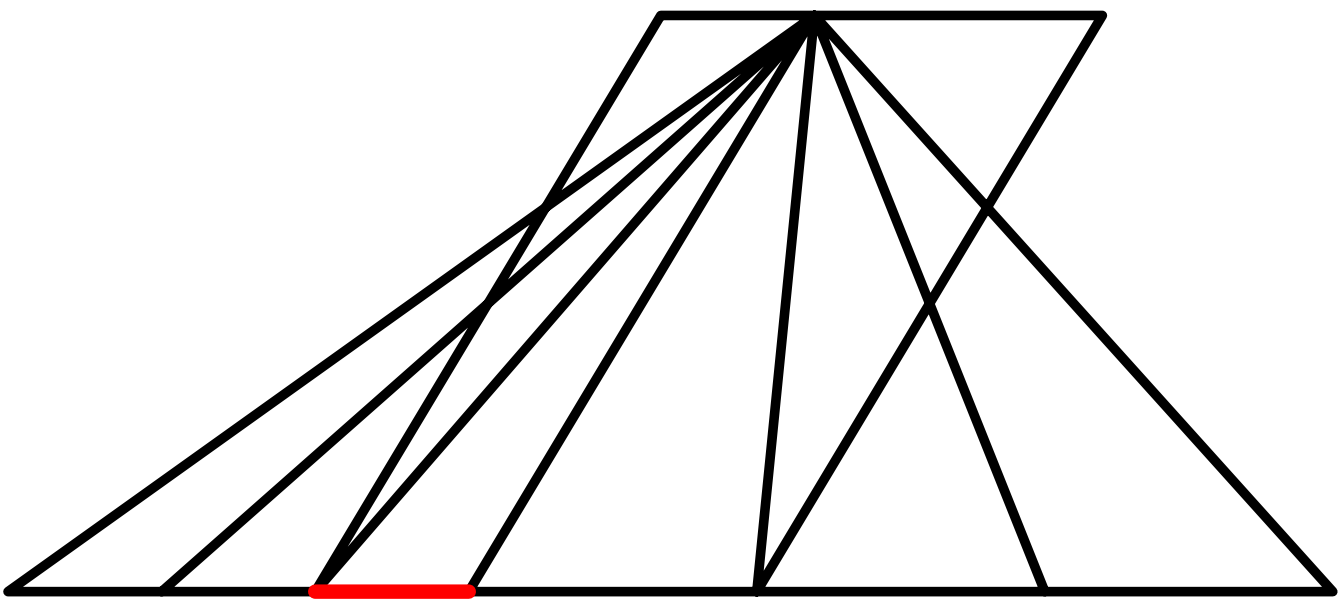

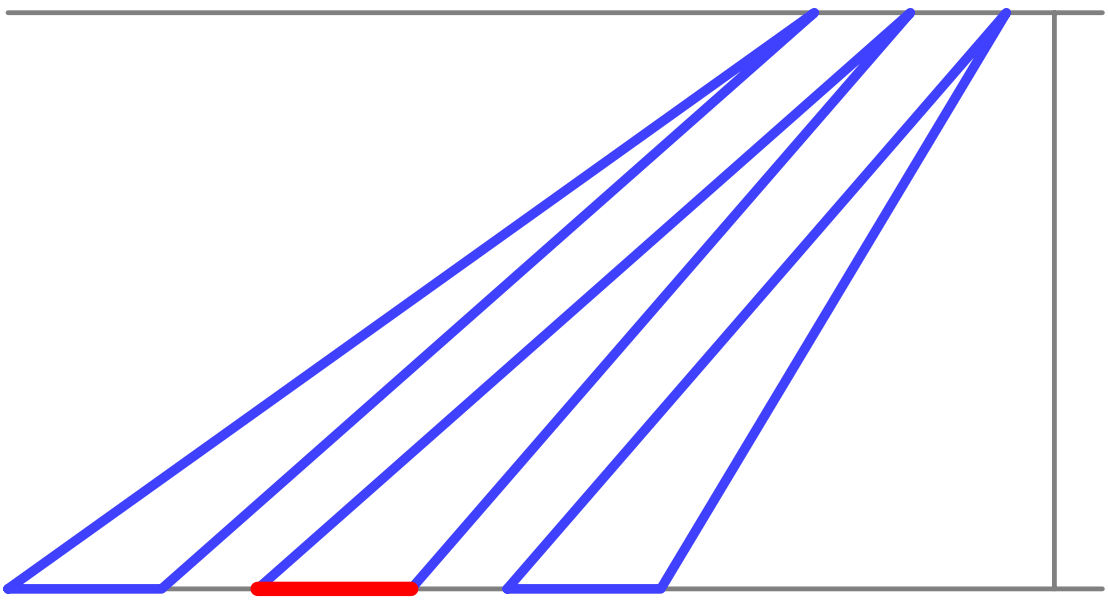

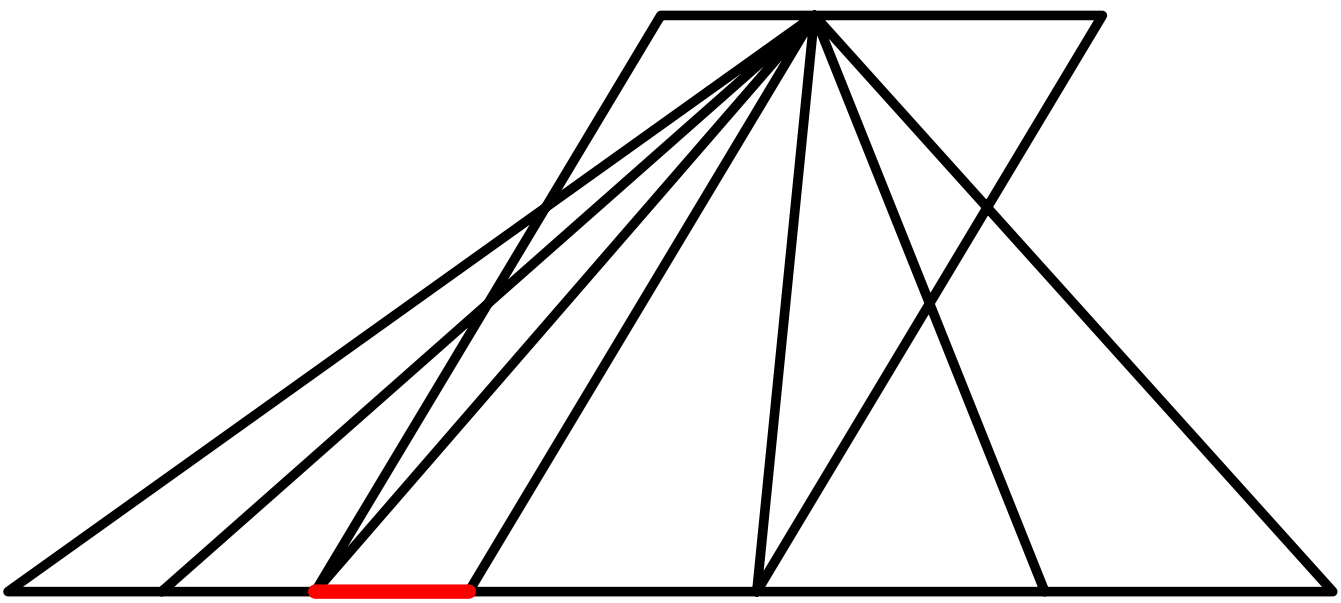

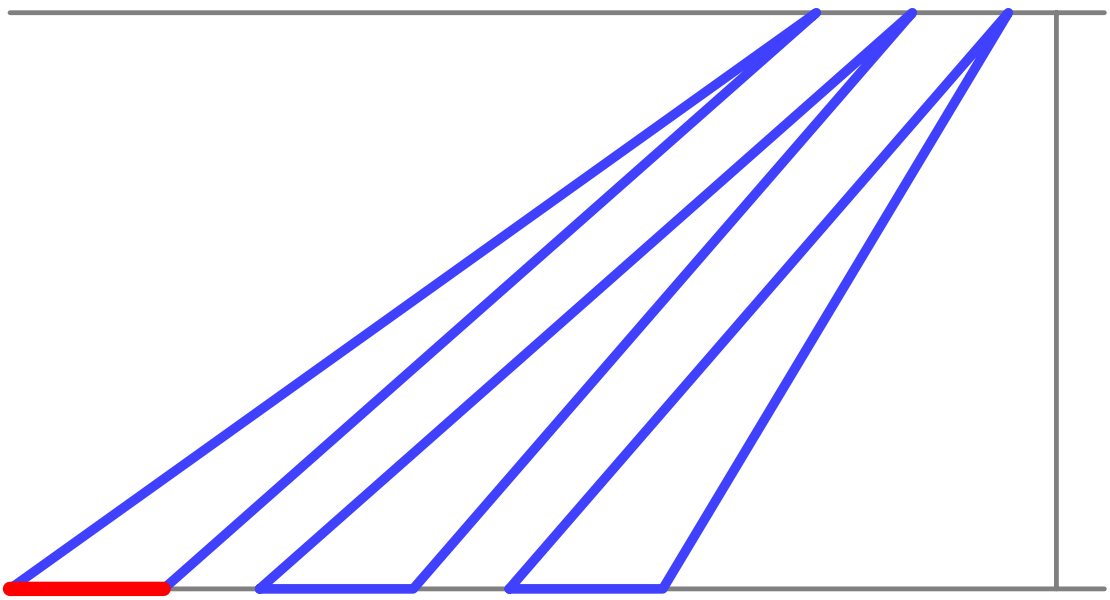

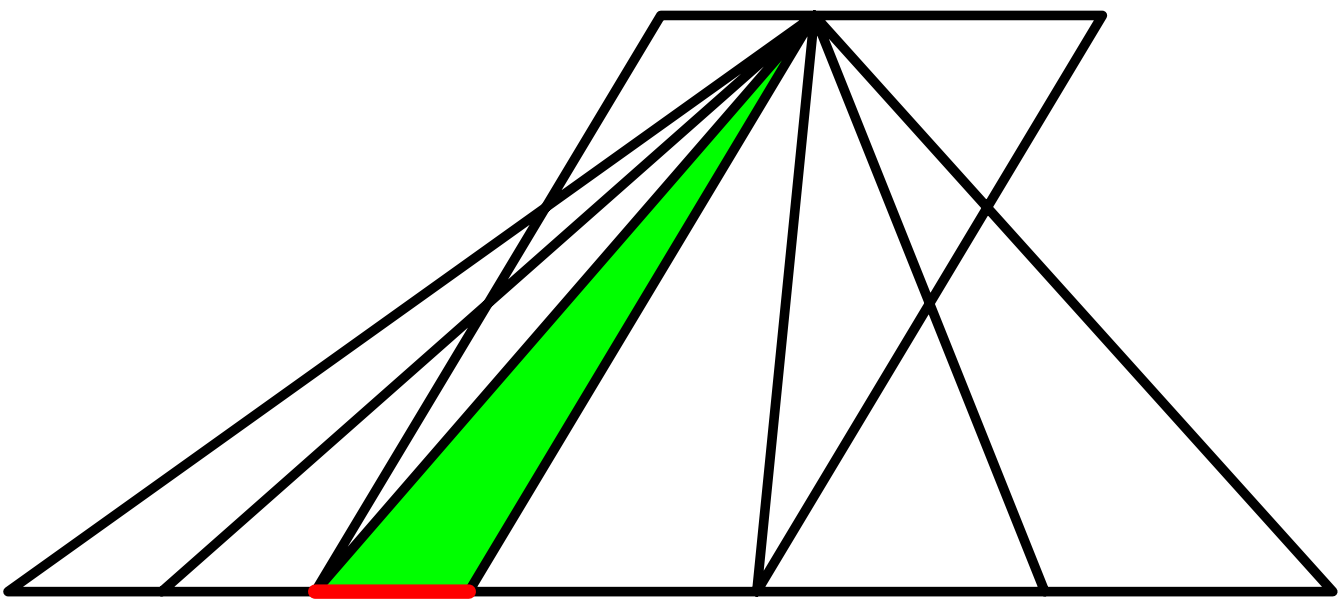

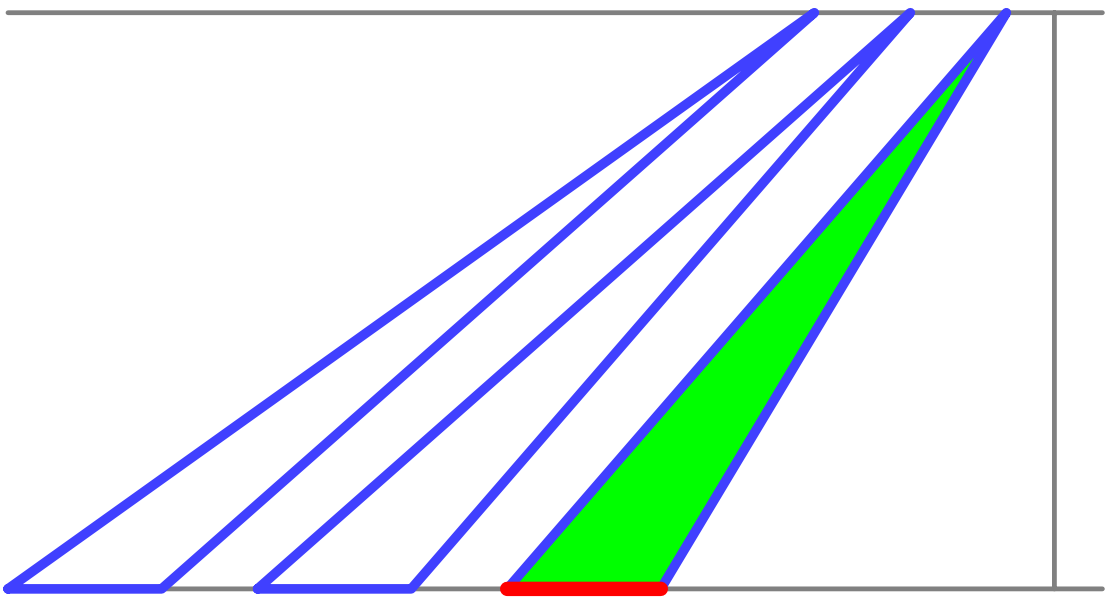

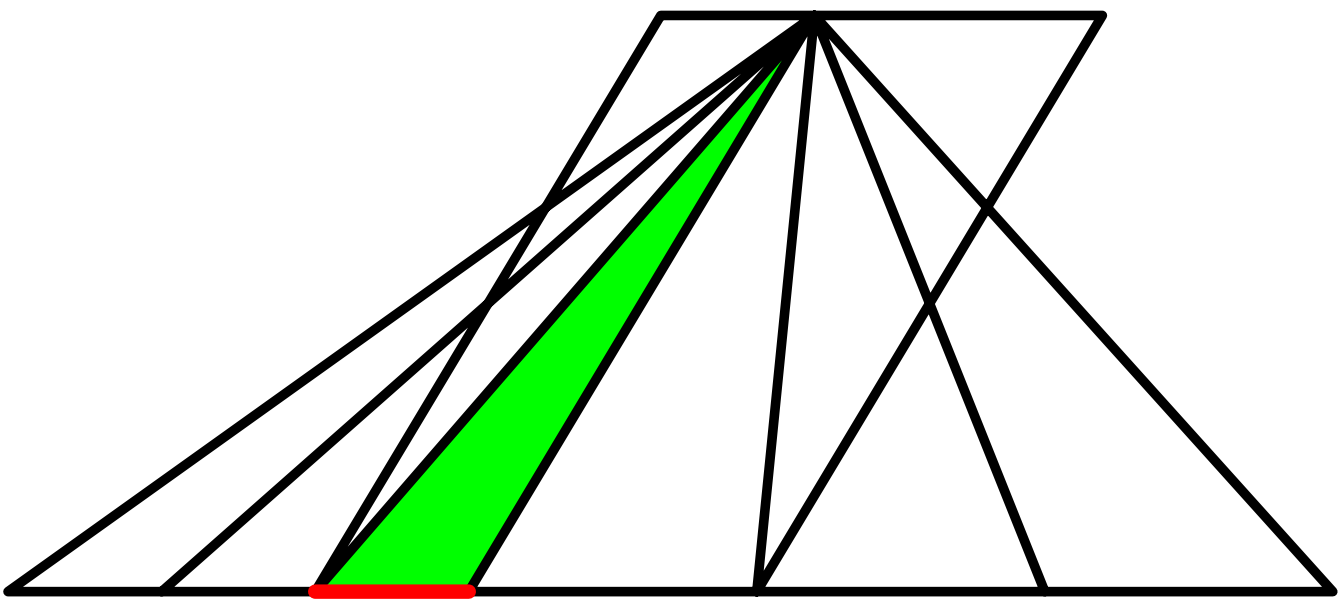

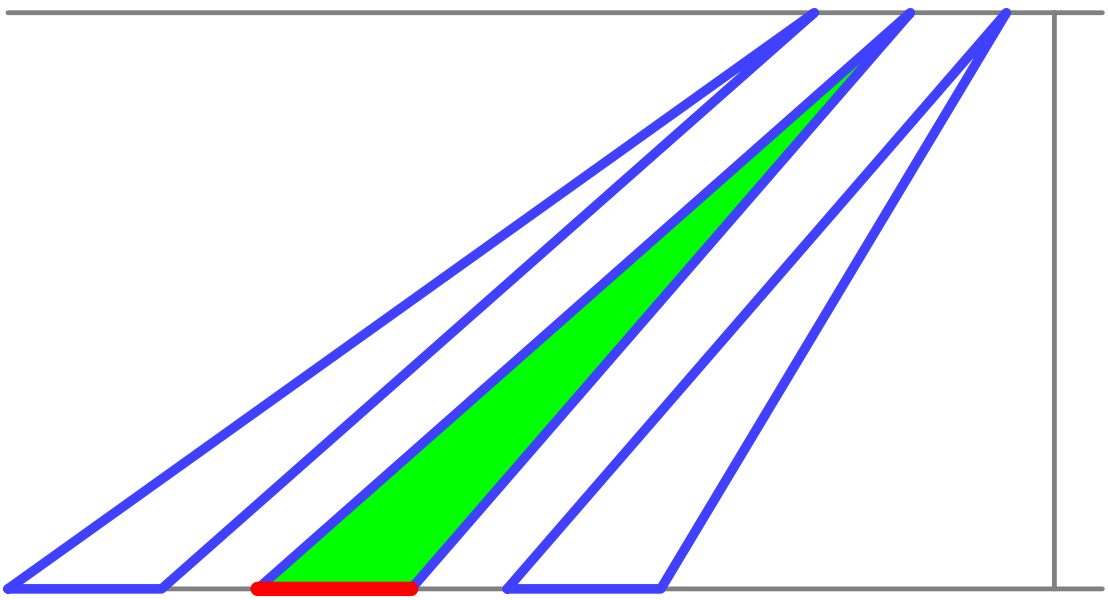

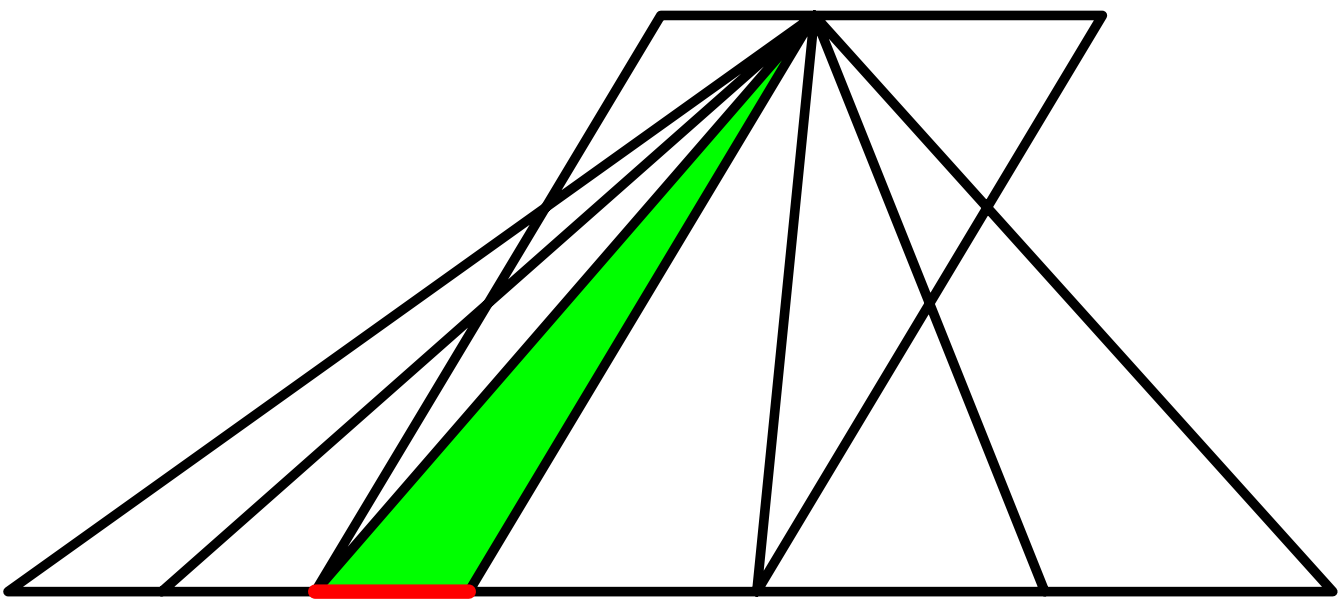

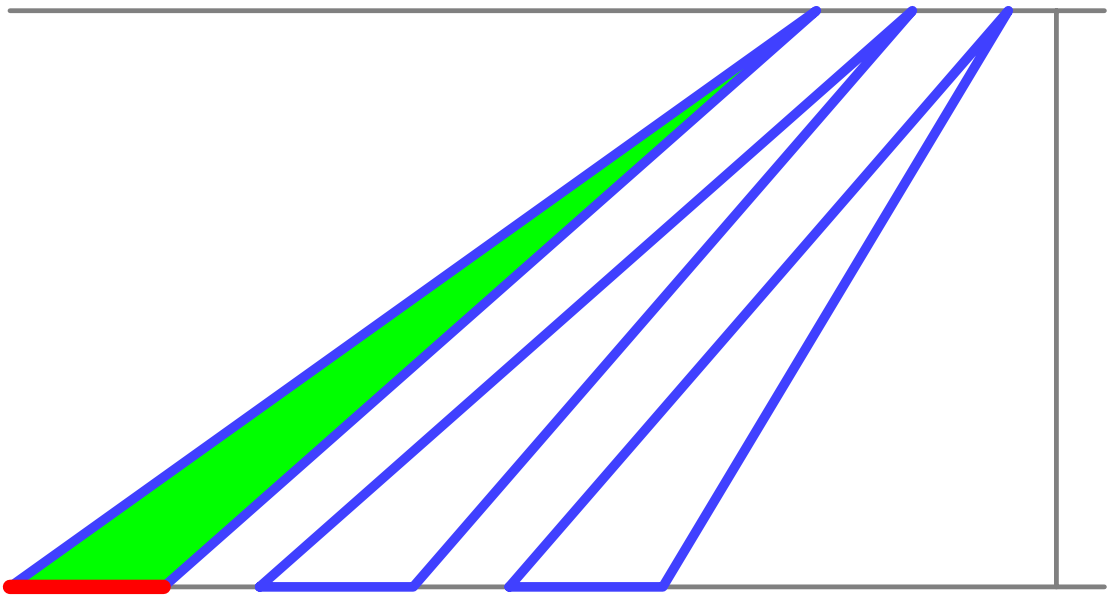

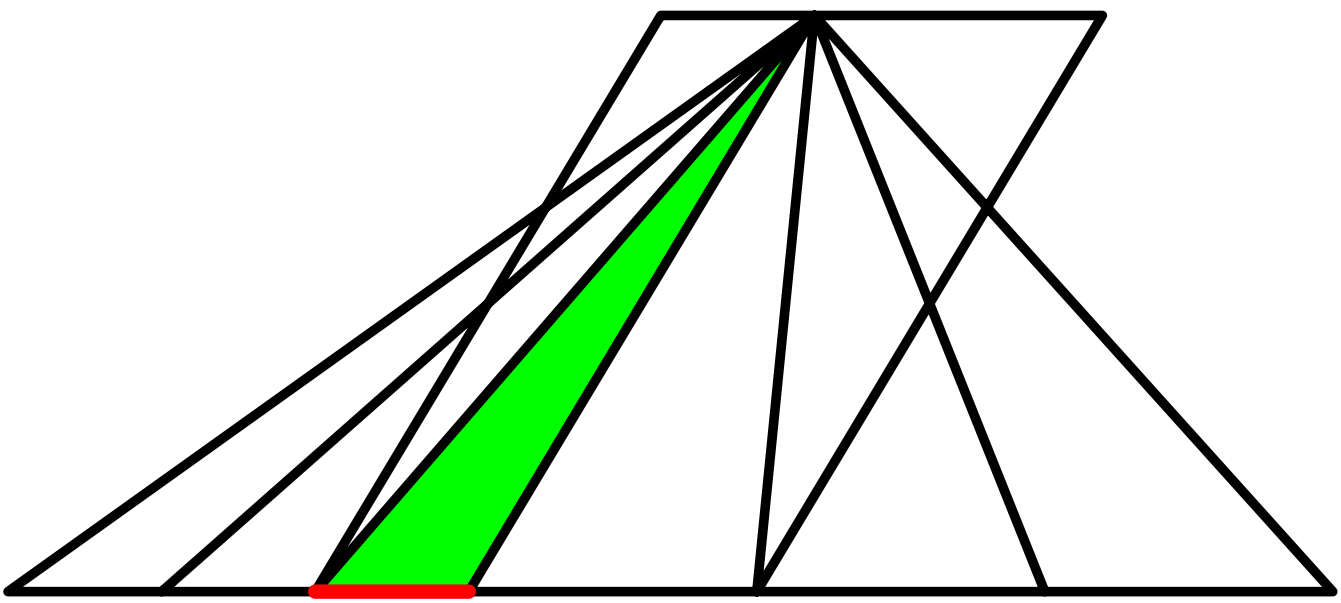

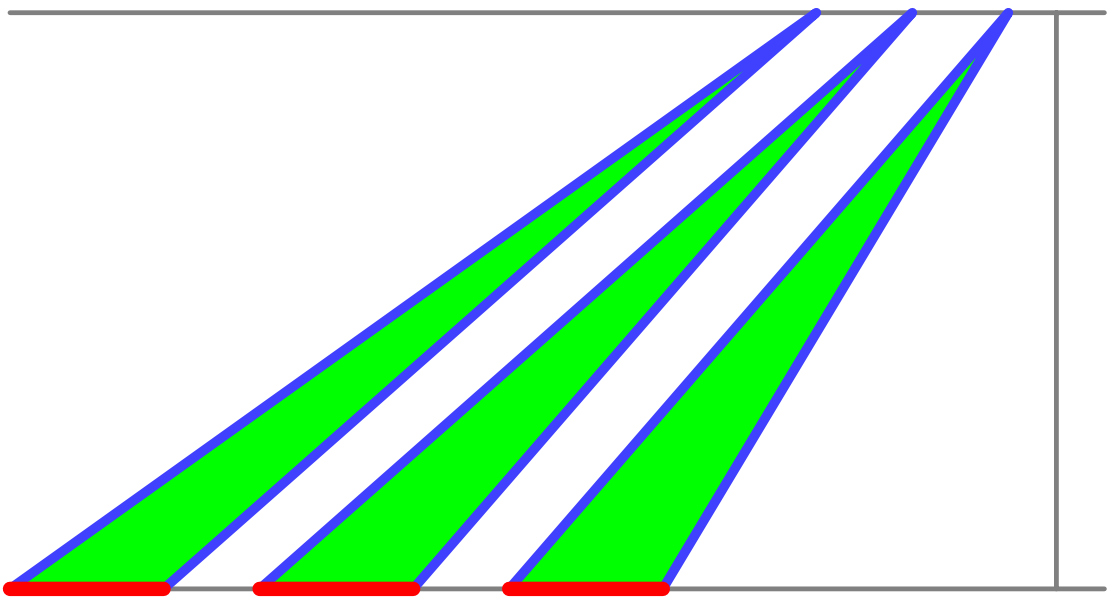

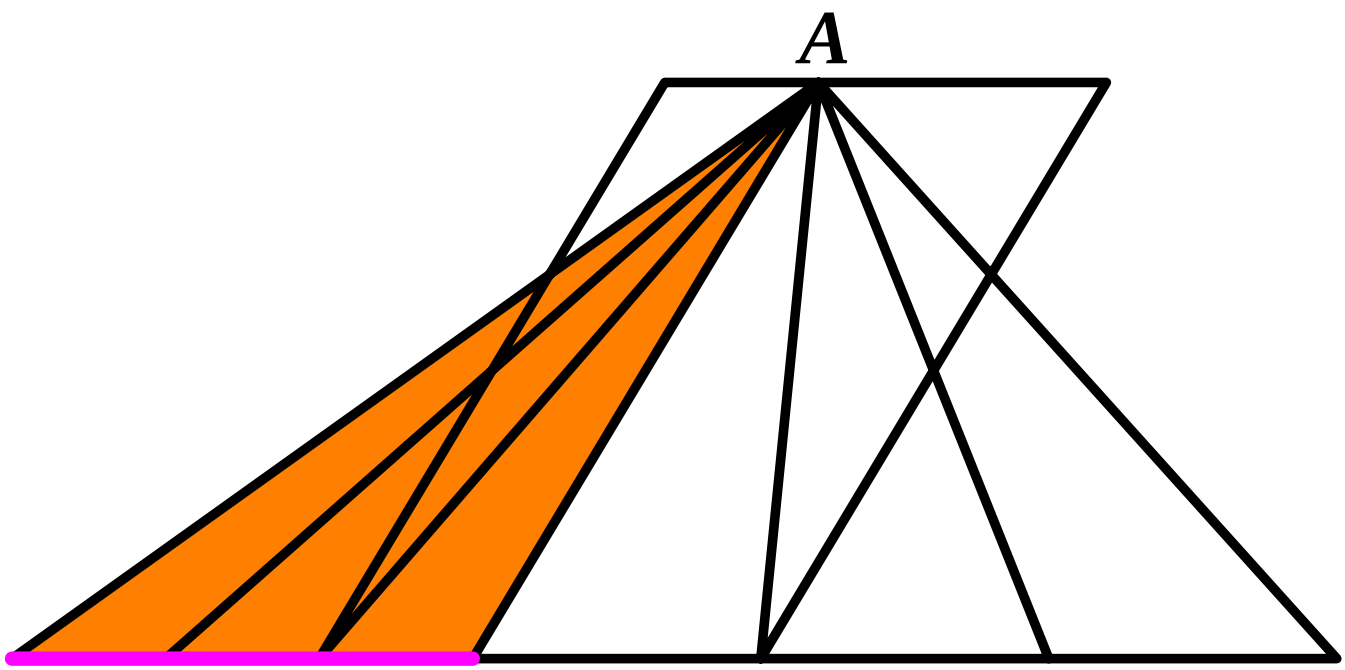

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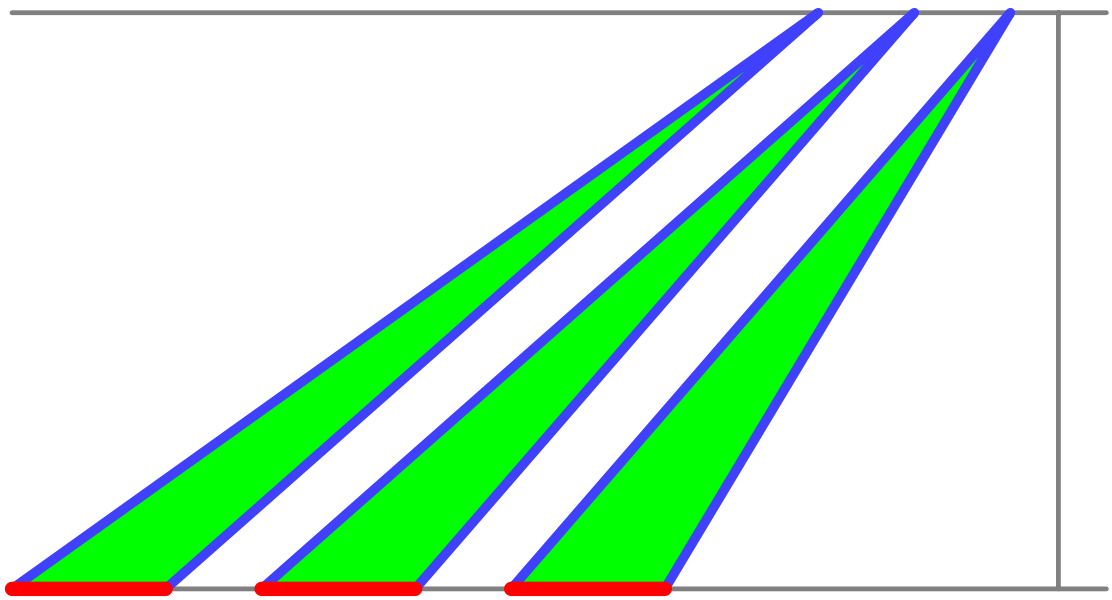
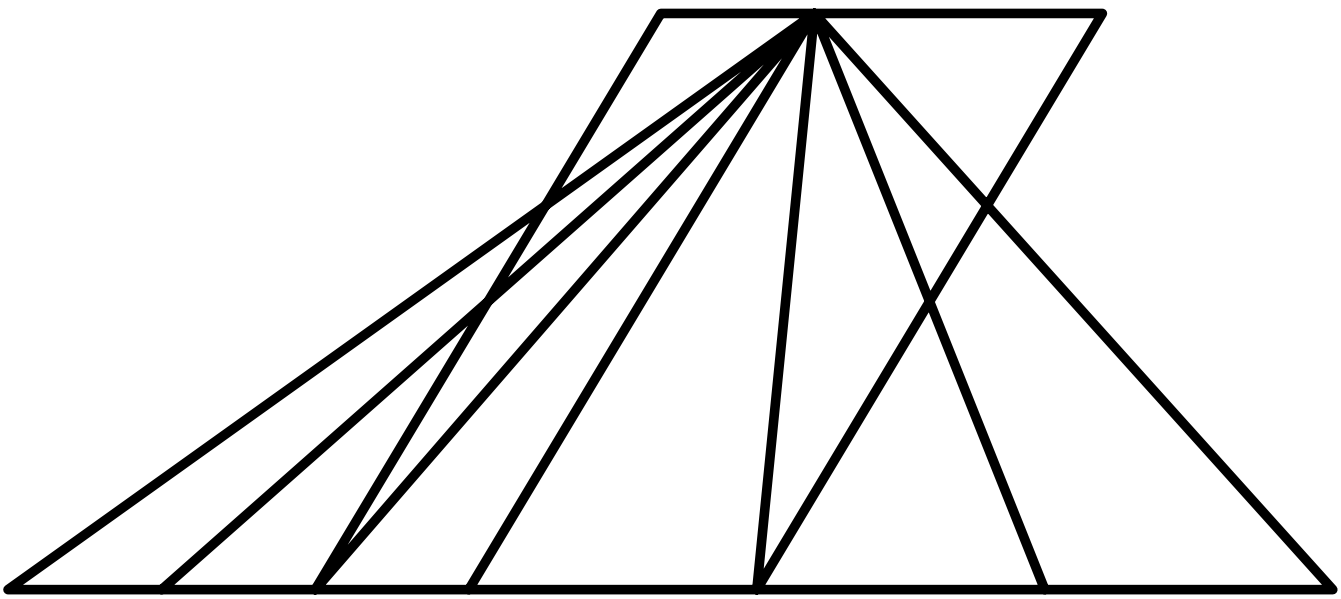
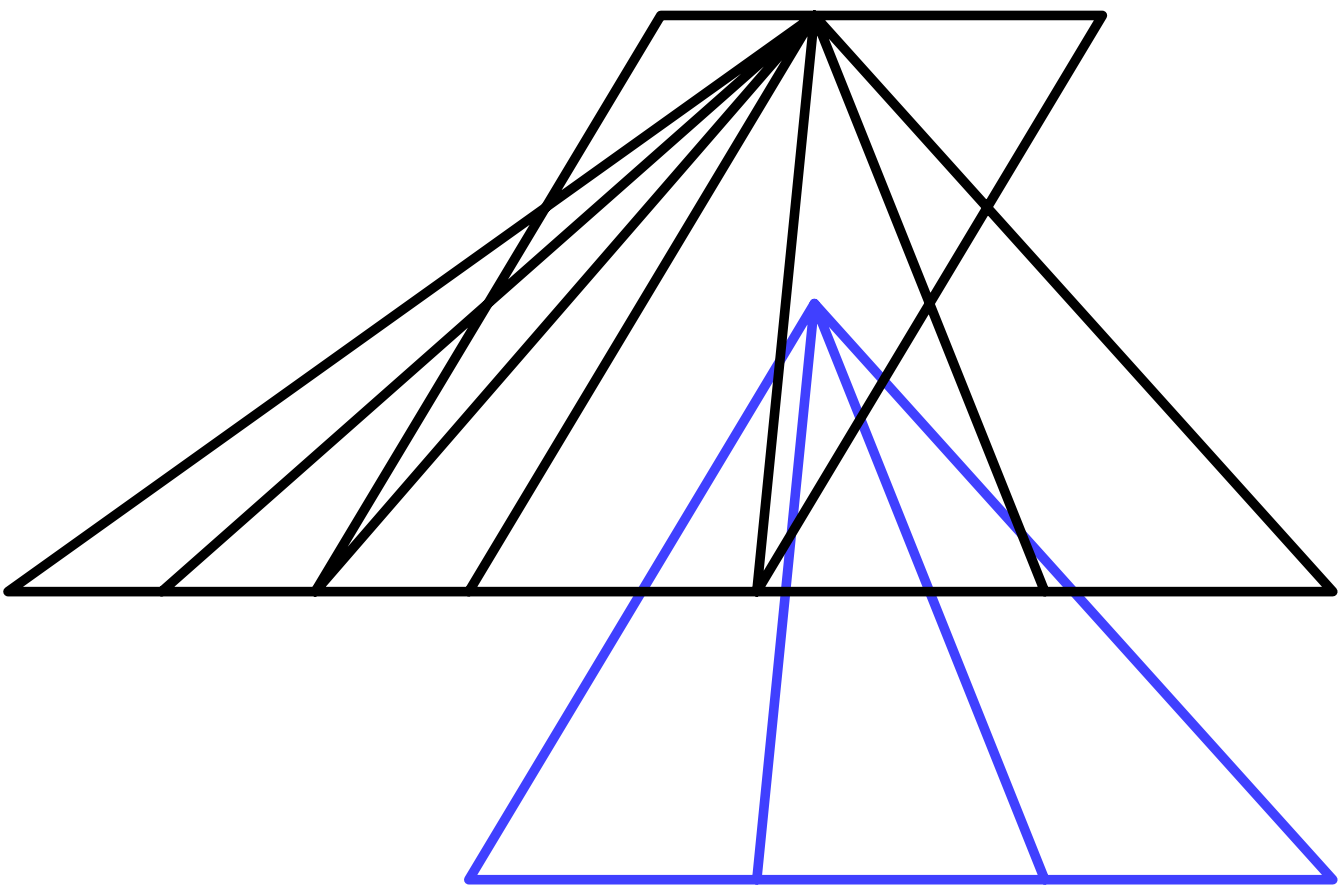
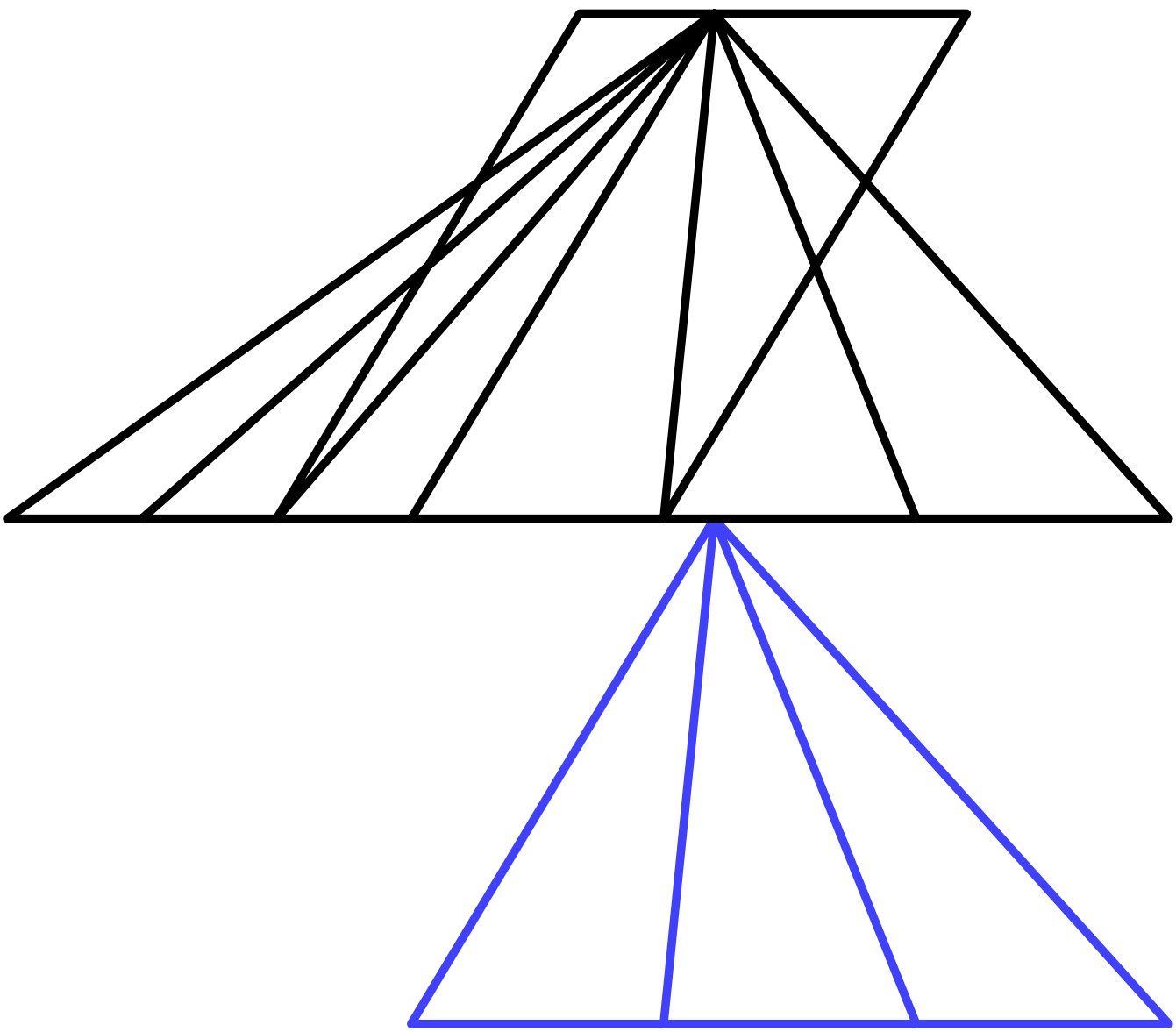
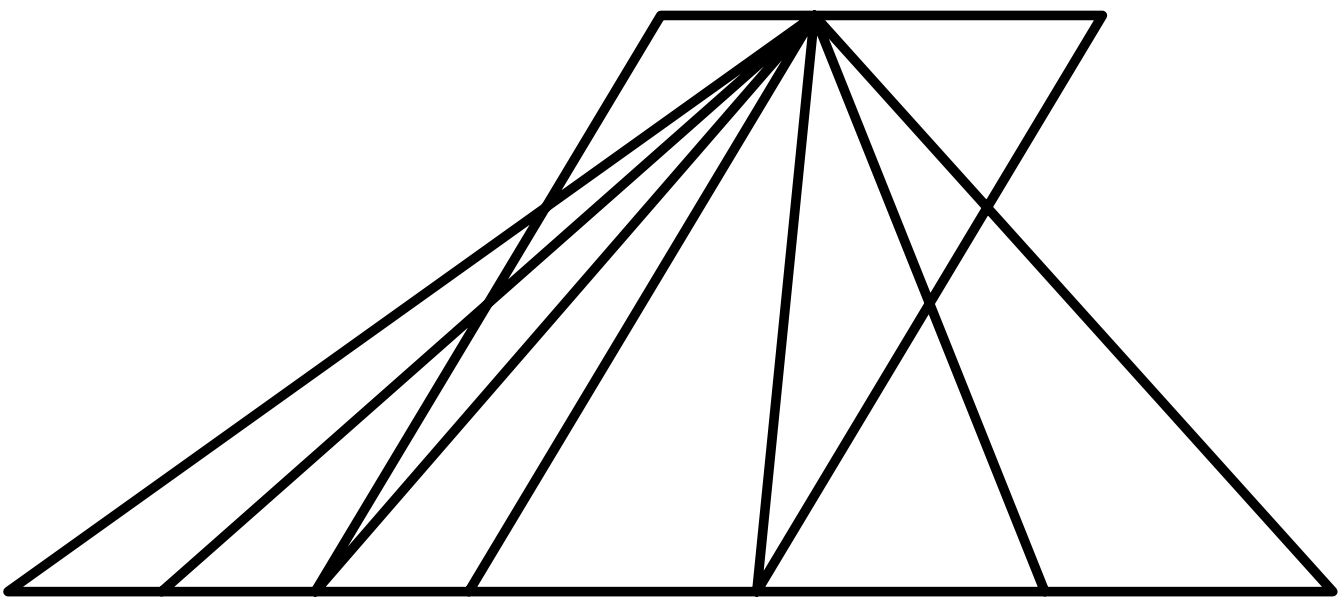
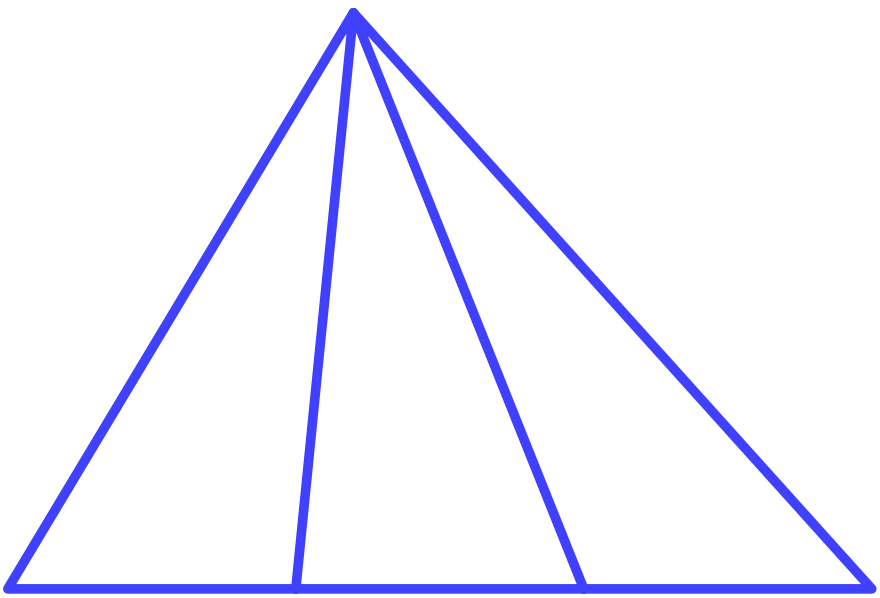


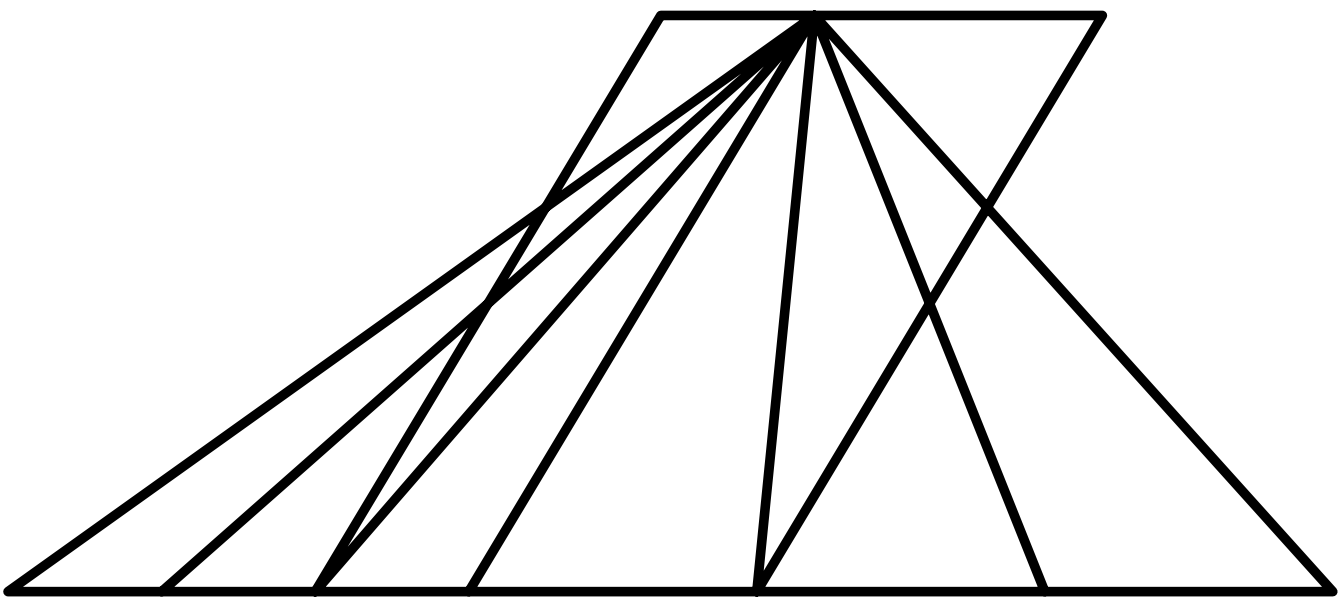


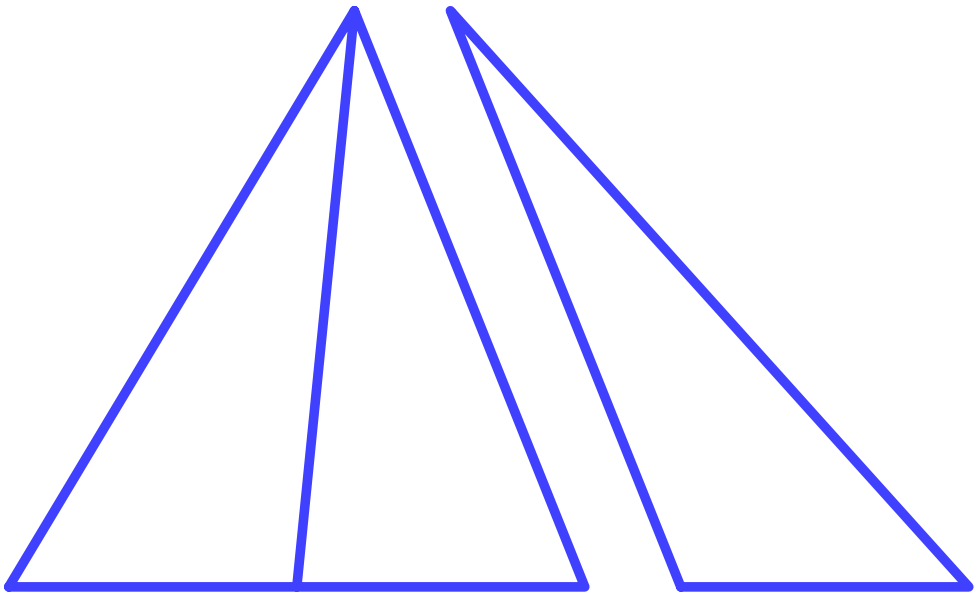


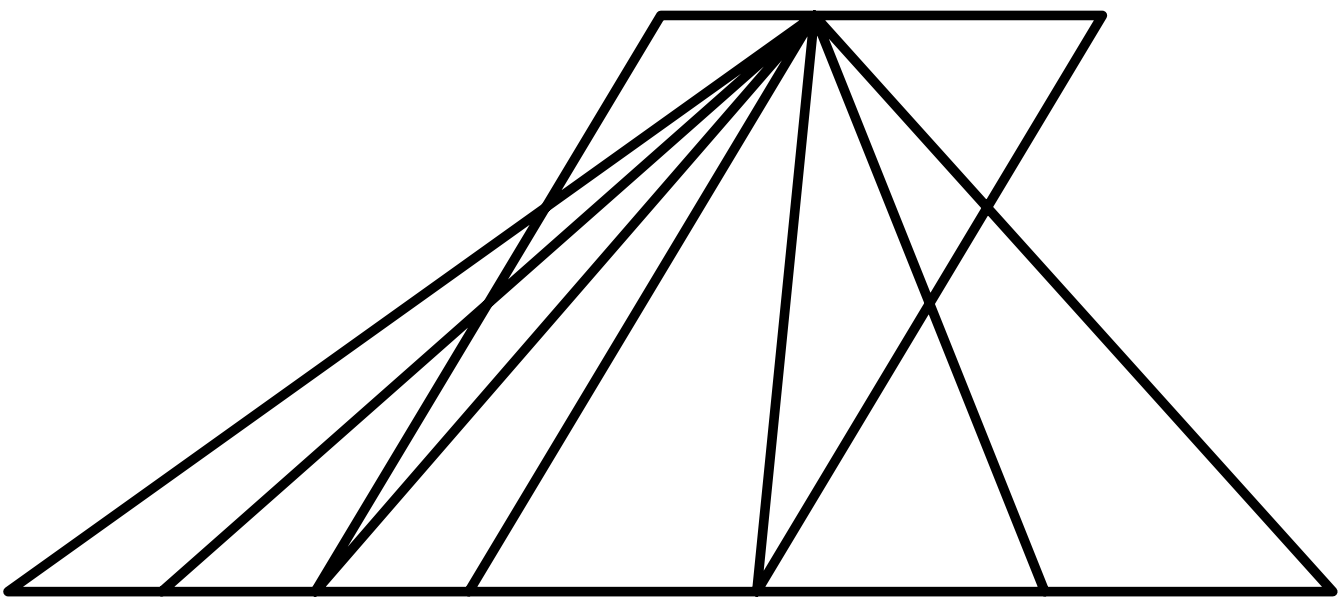


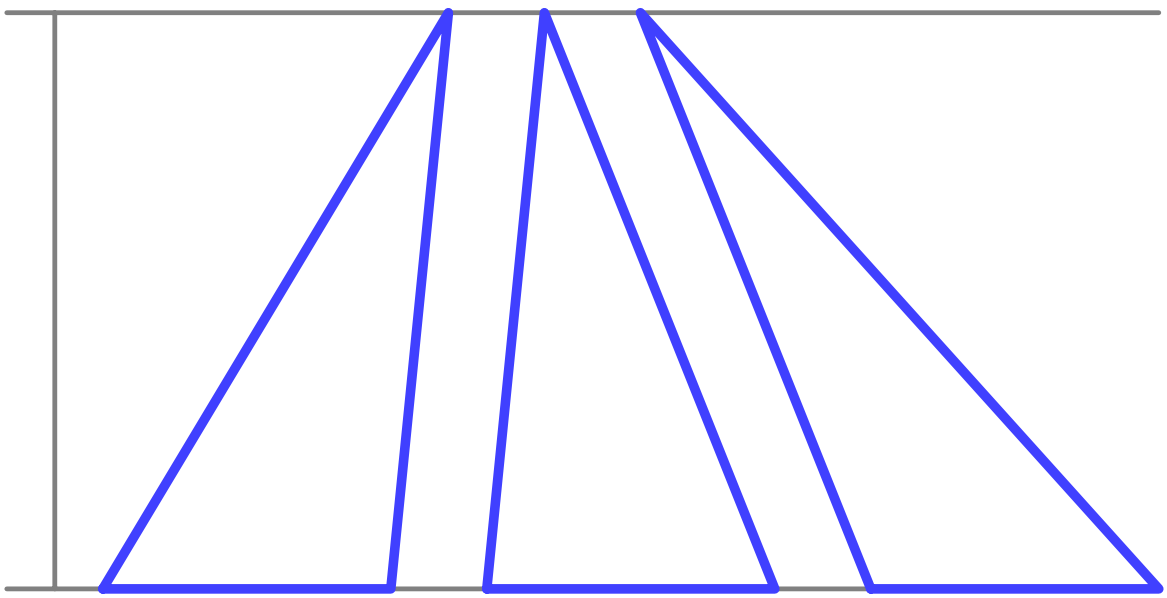


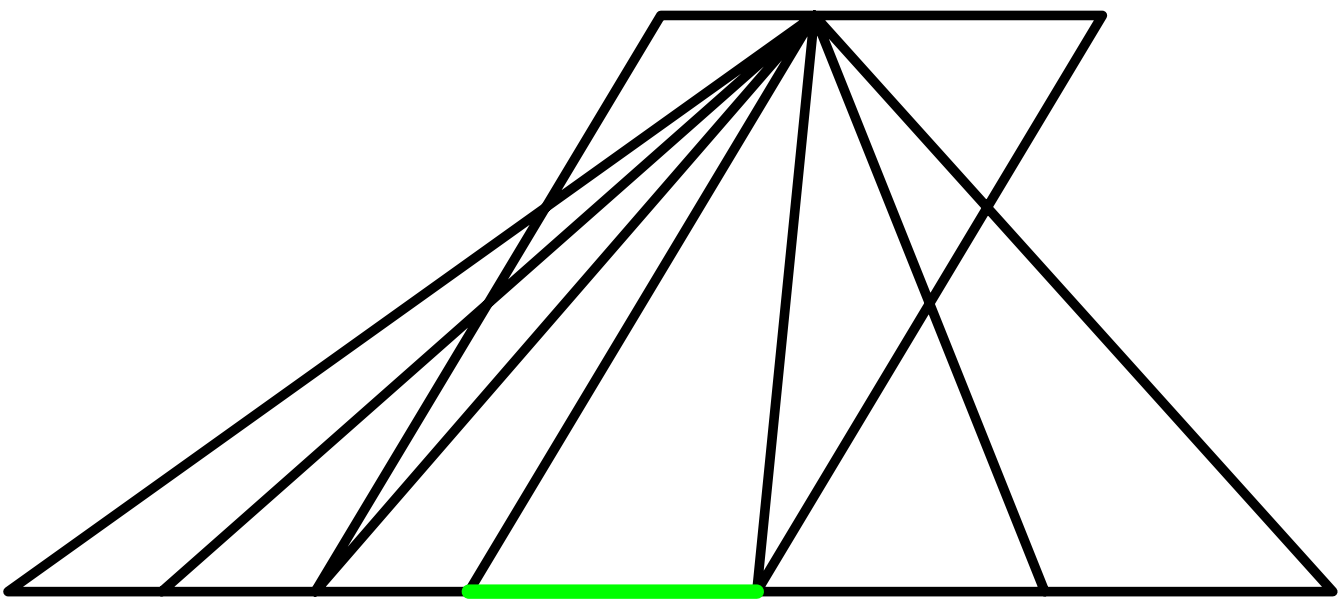


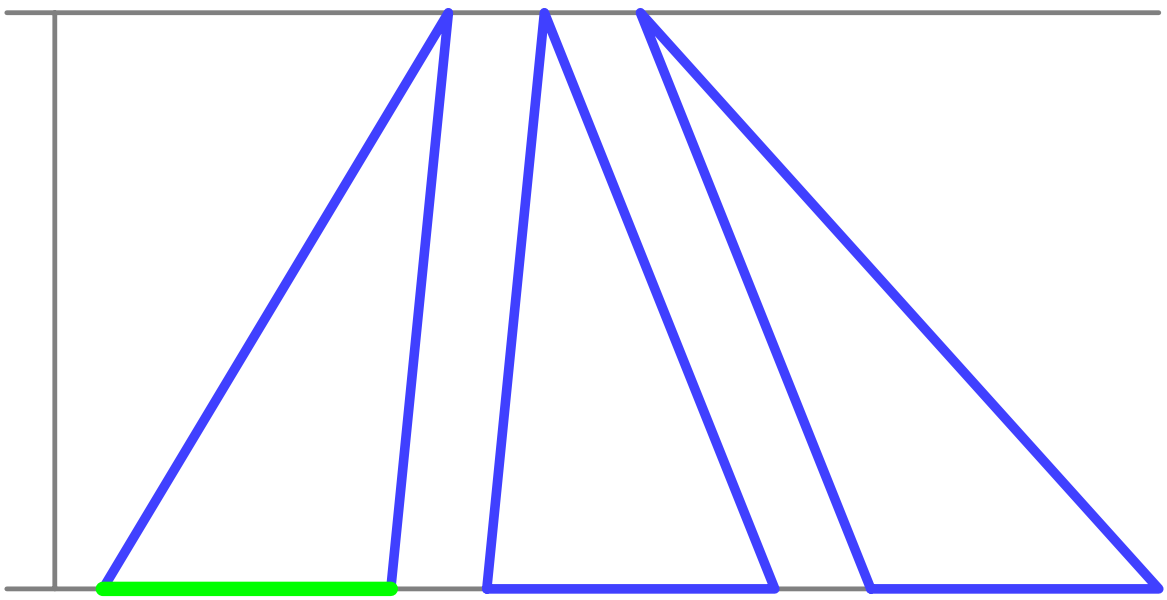


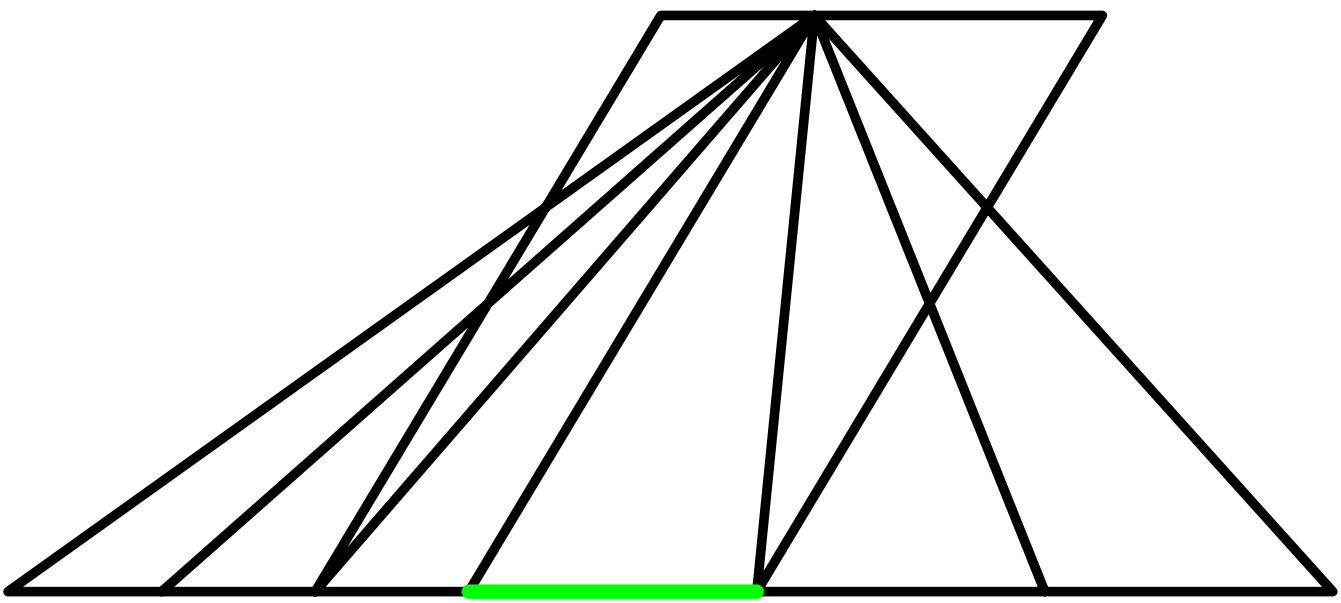


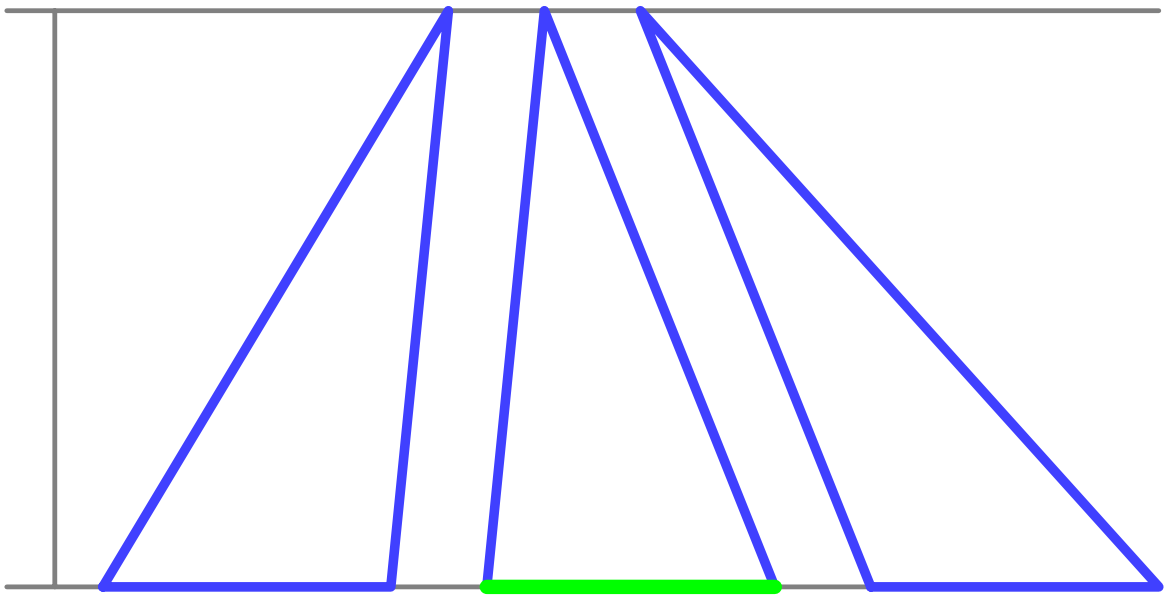


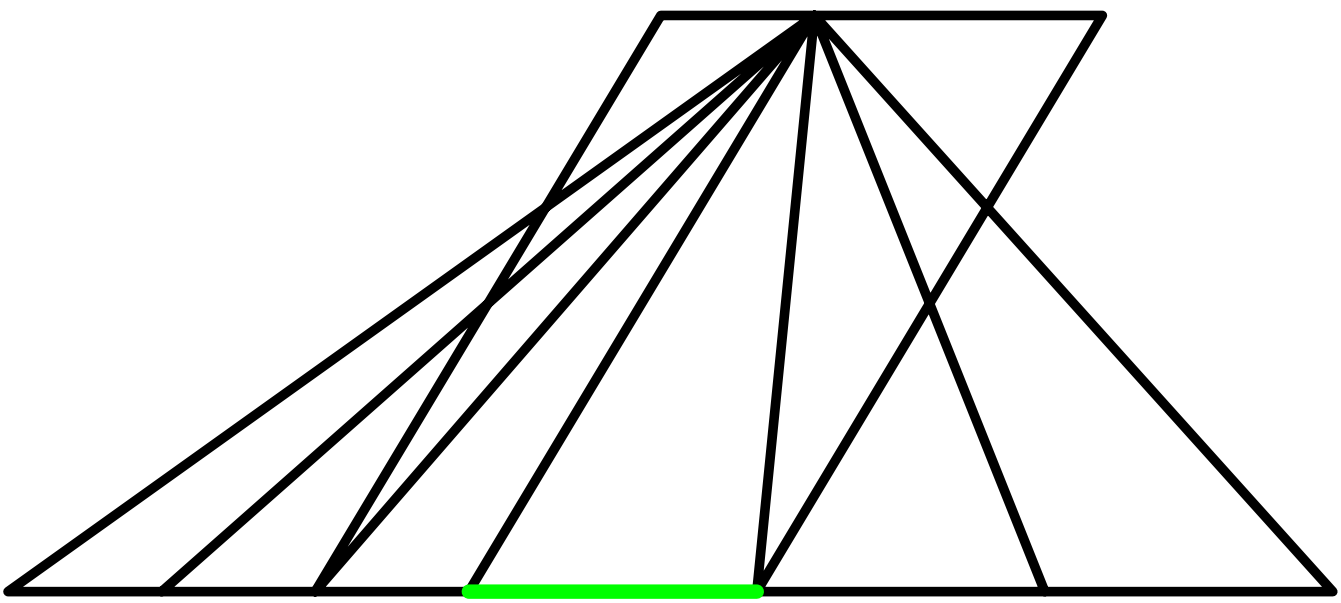


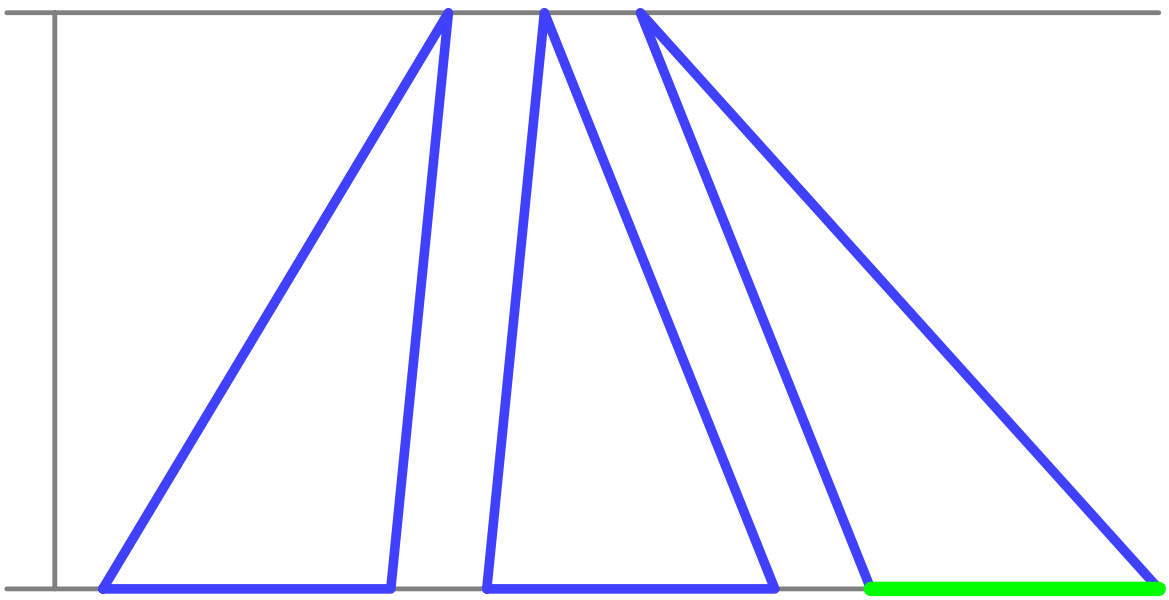


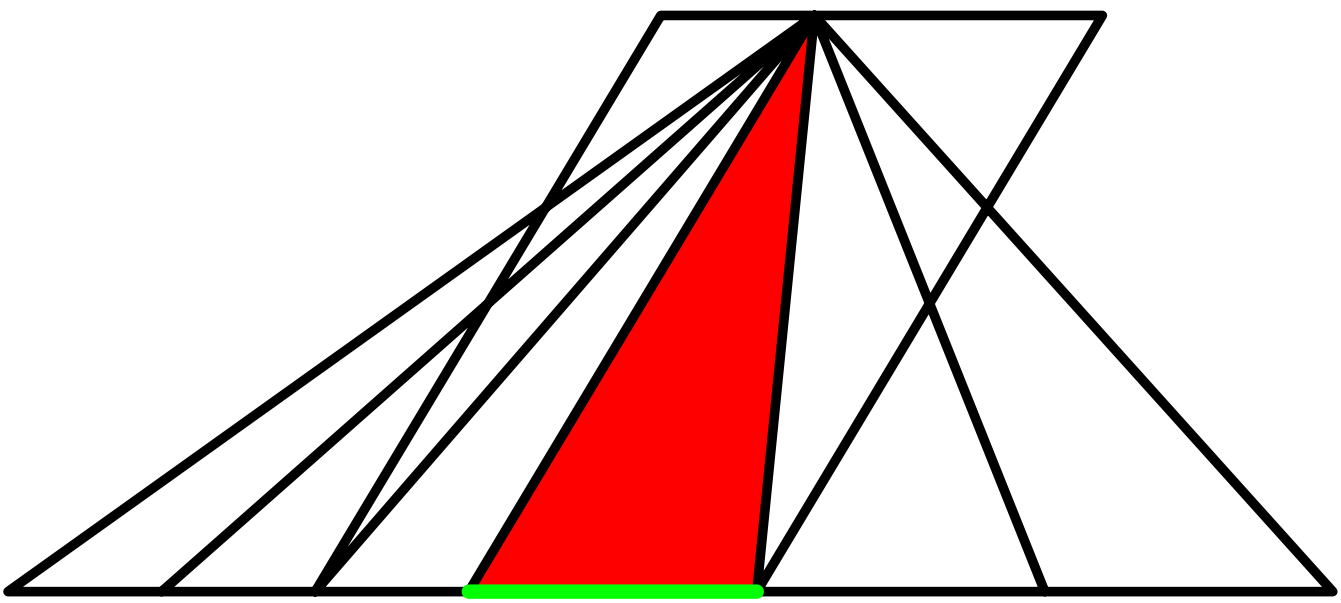


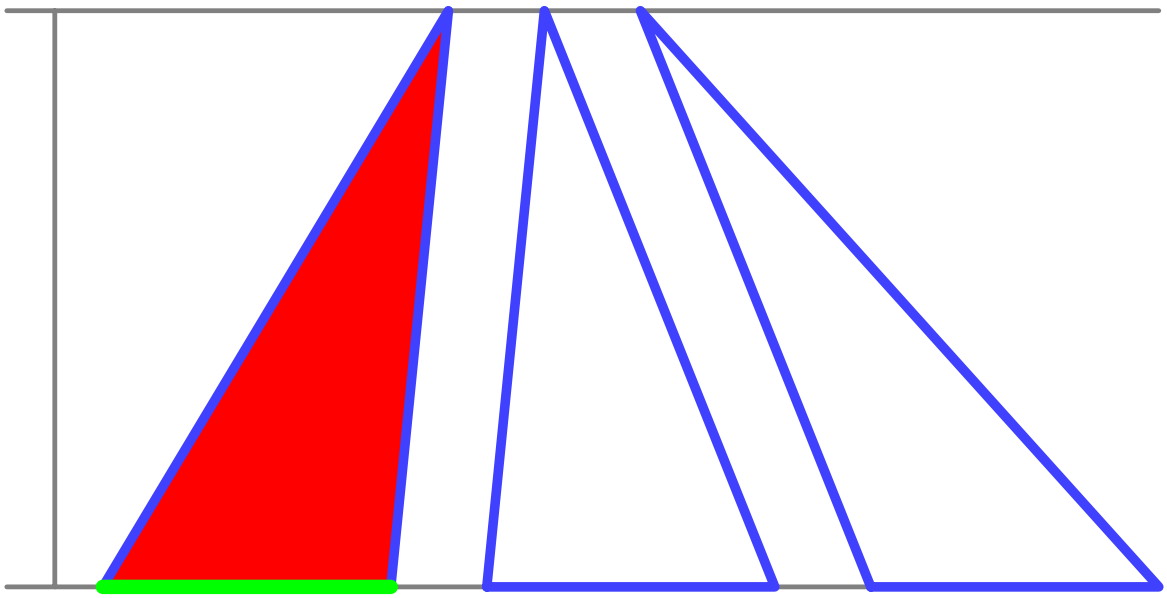


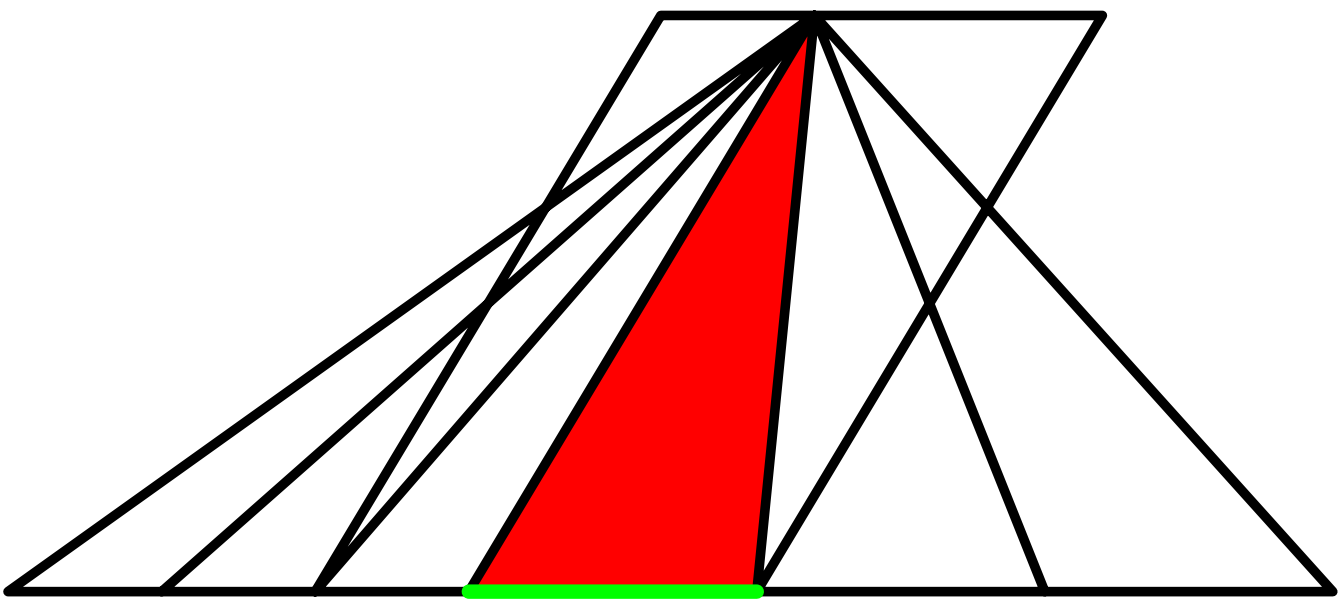


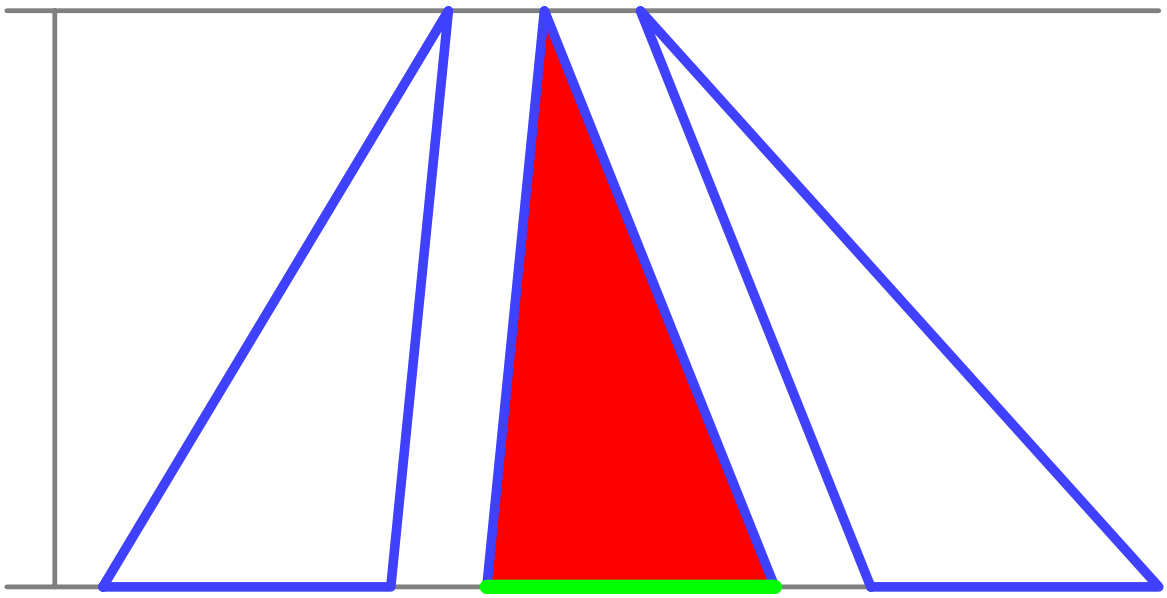


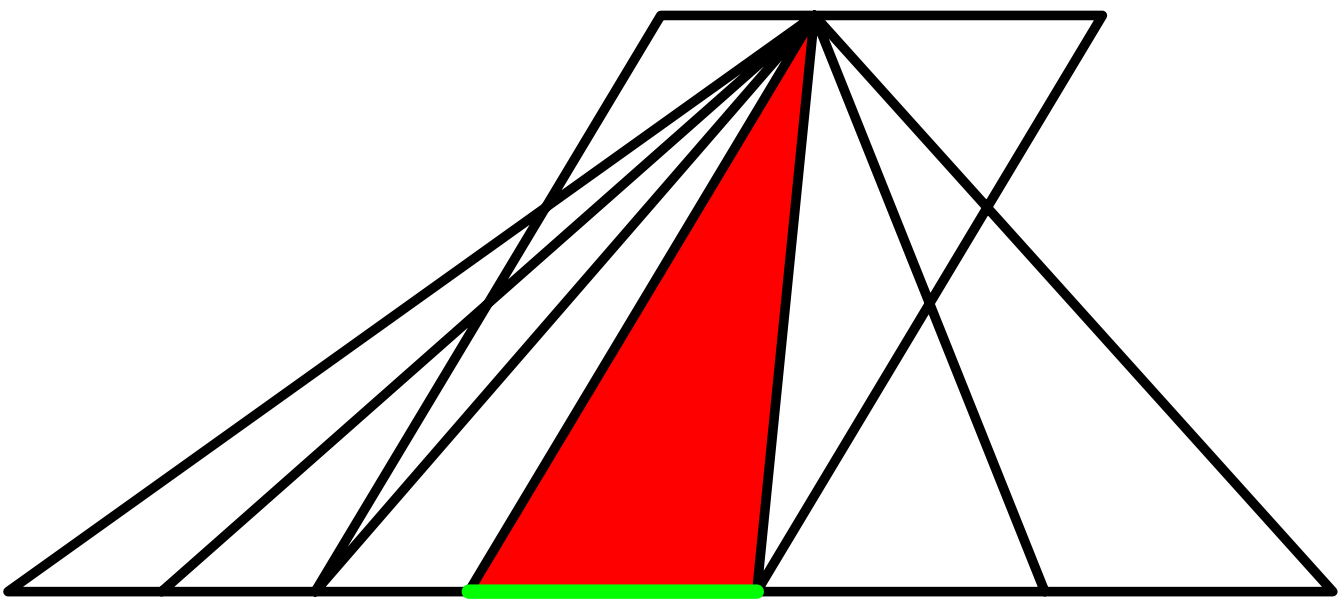


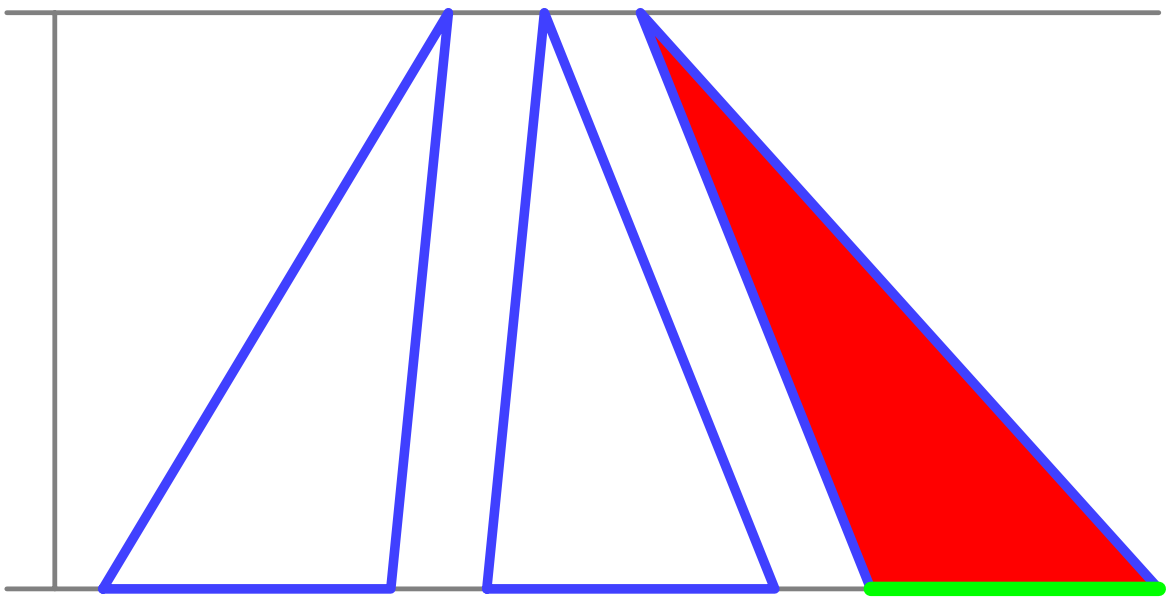


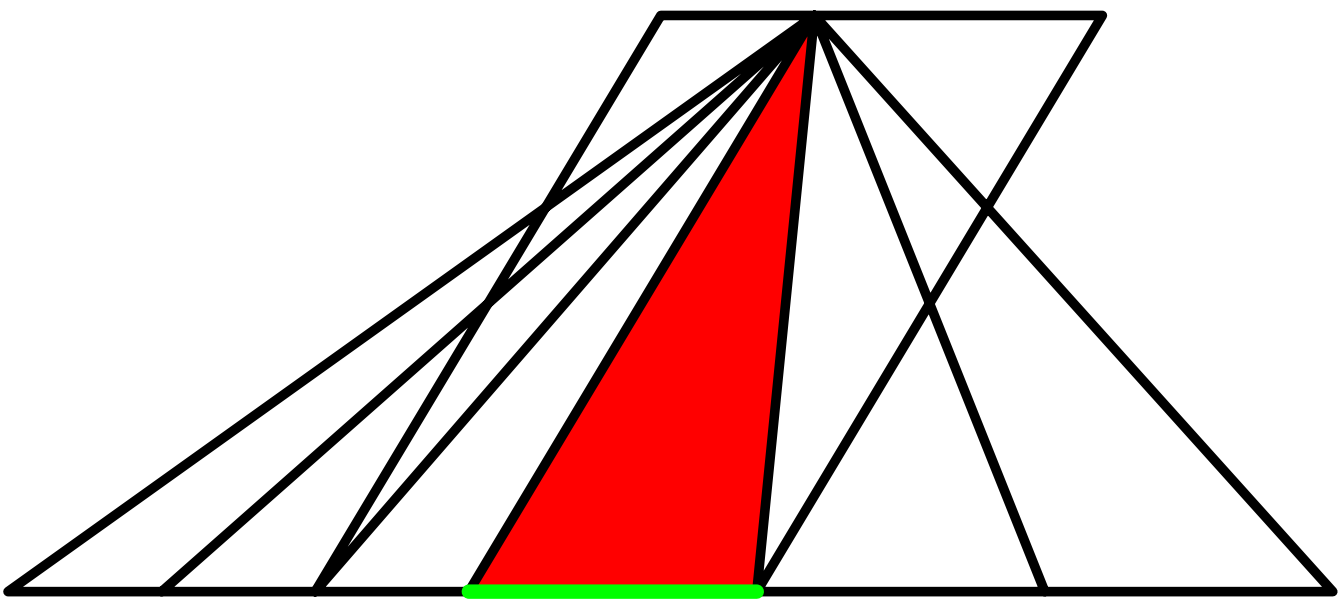


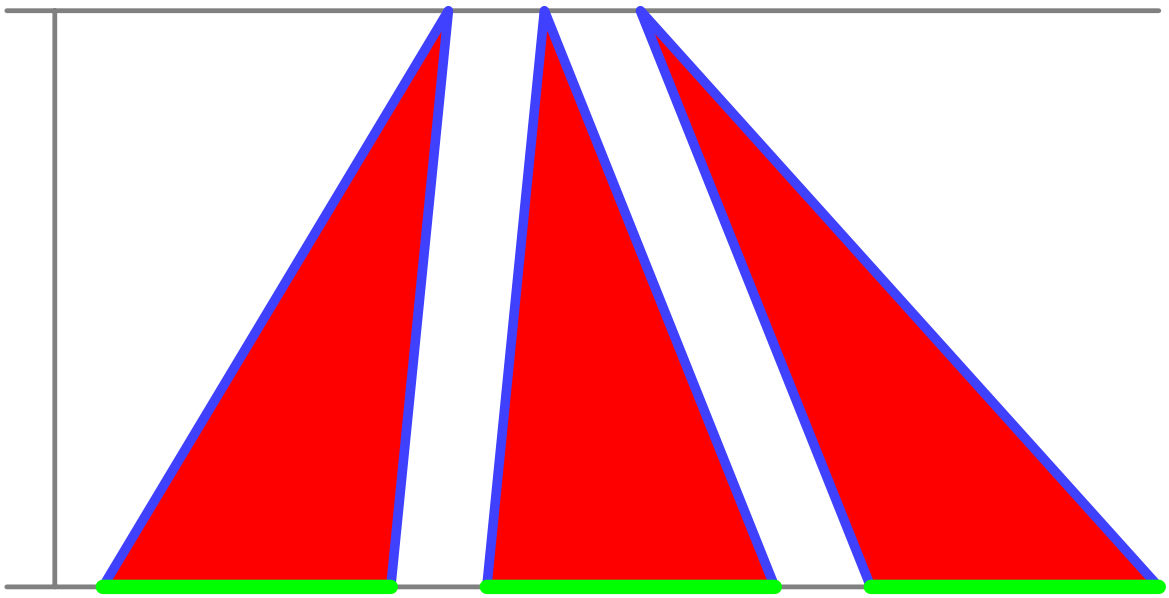


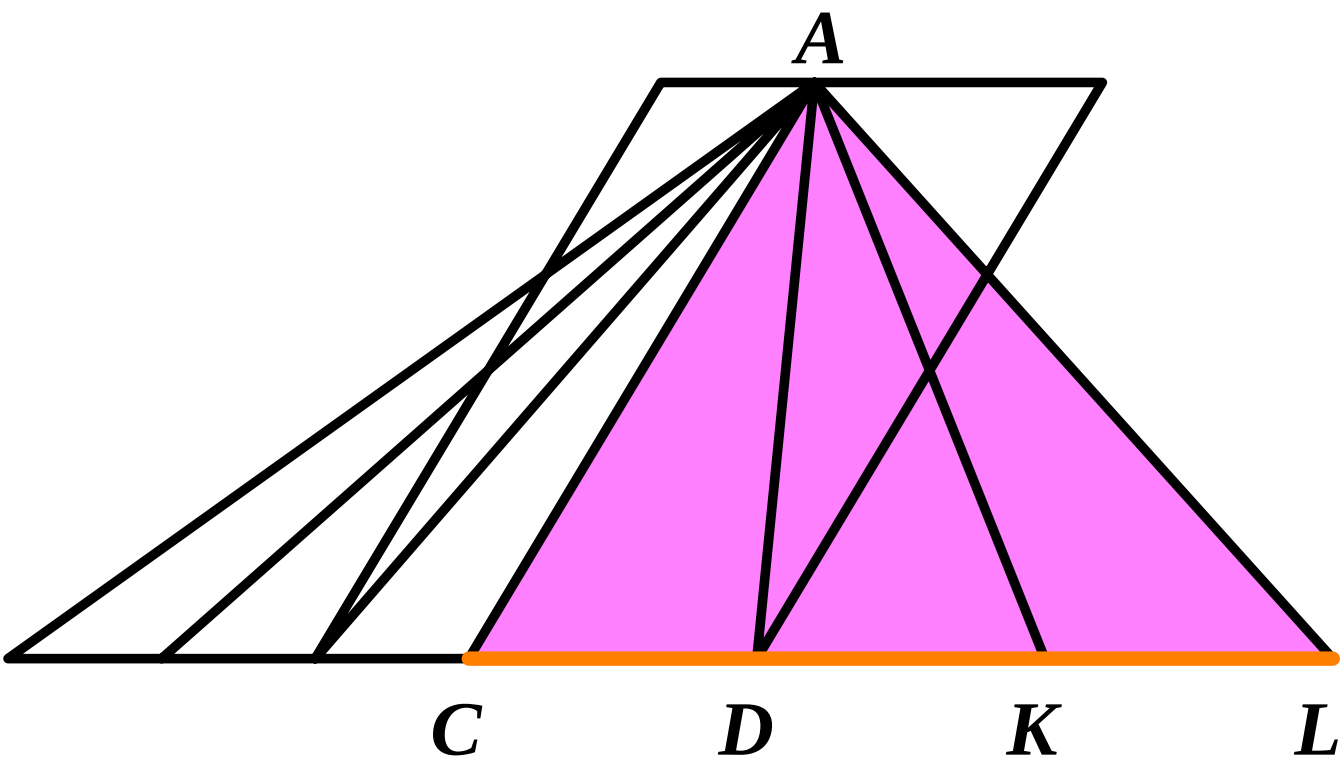




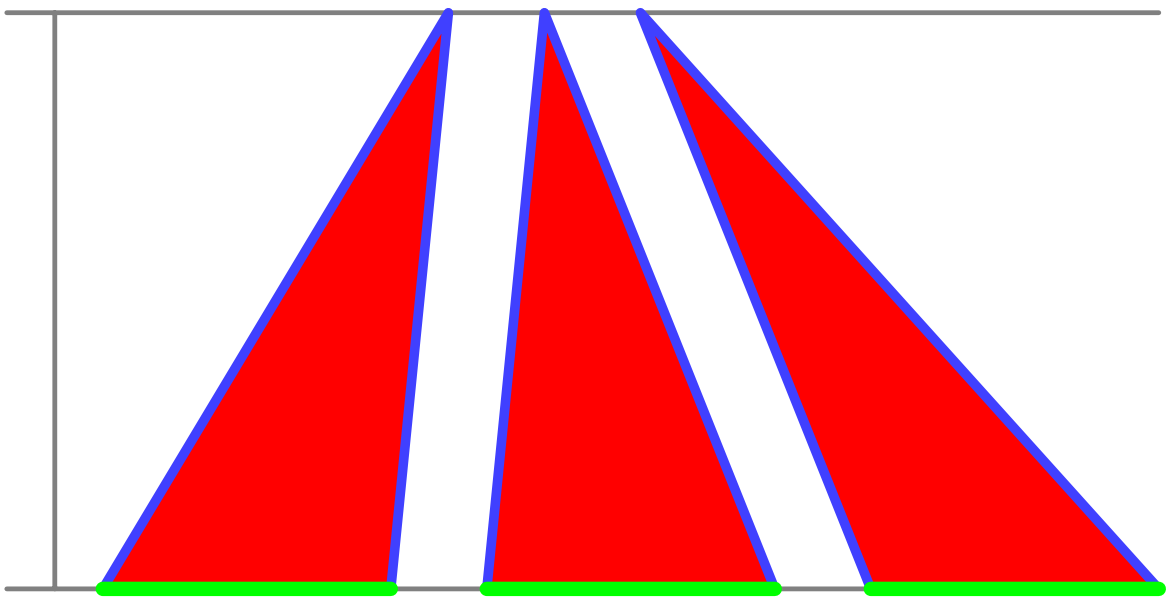


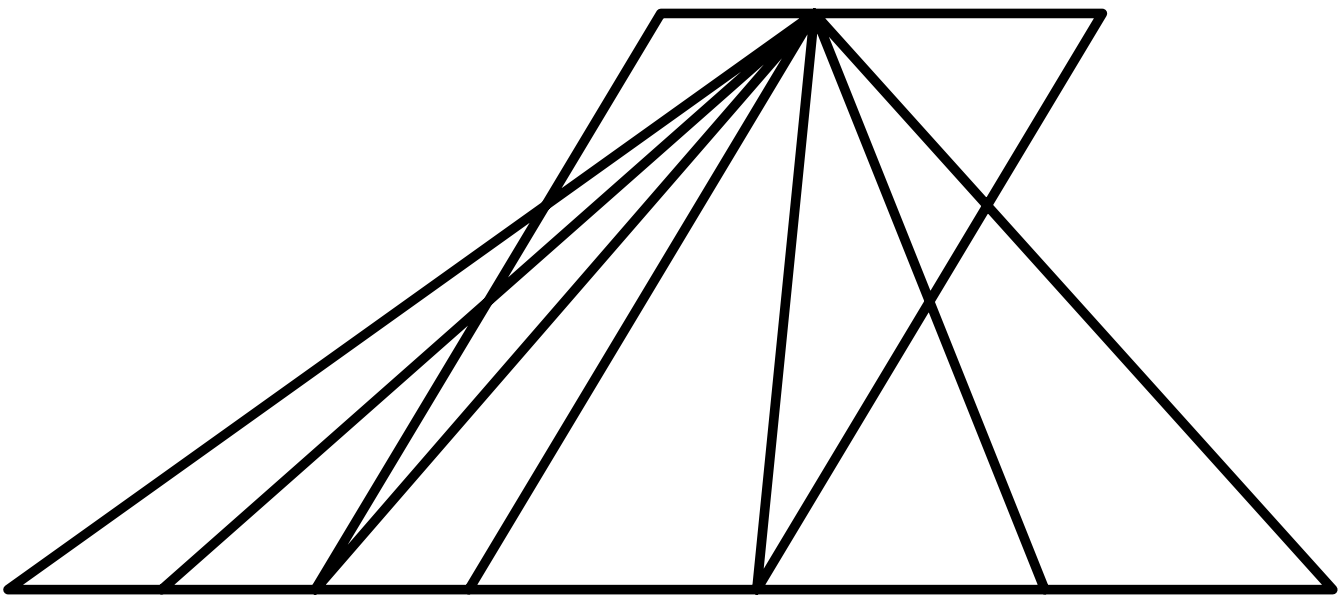


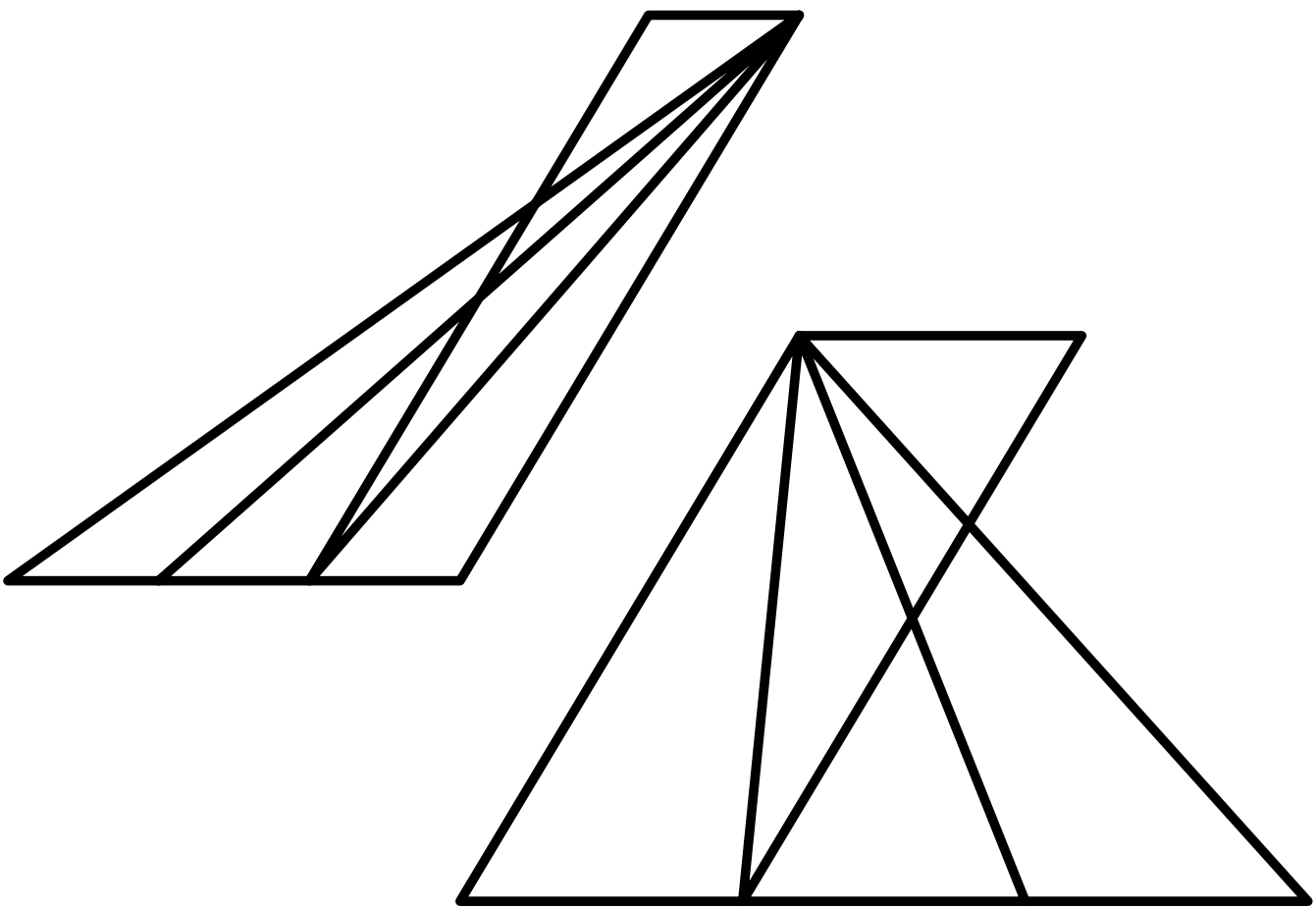


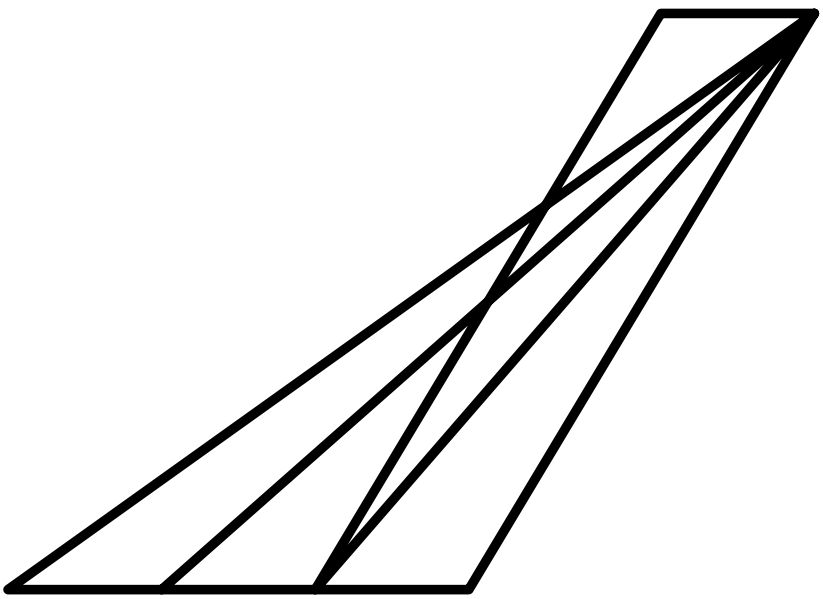


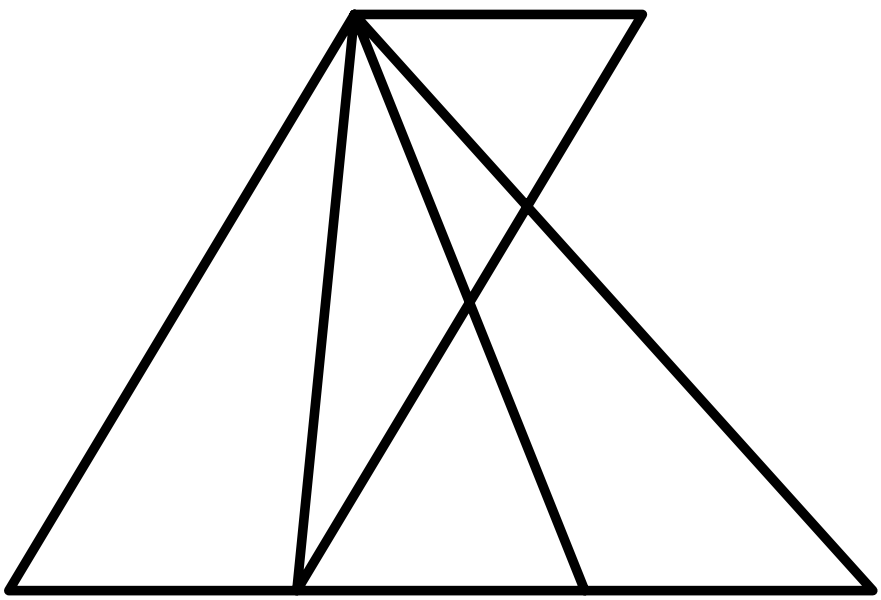
$CL : CD = ACL : ACD$

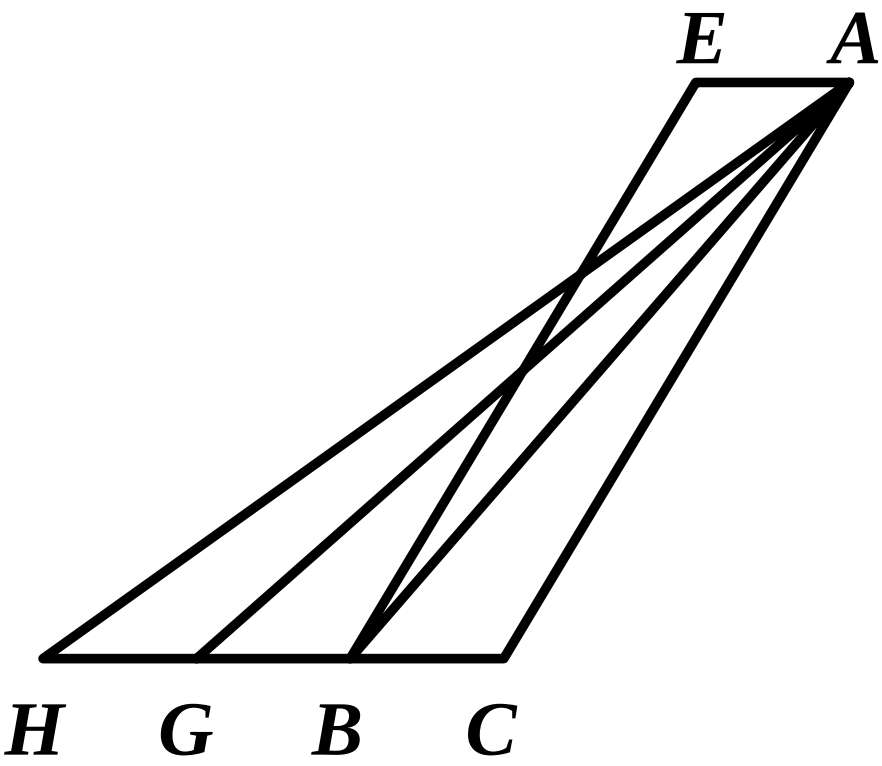


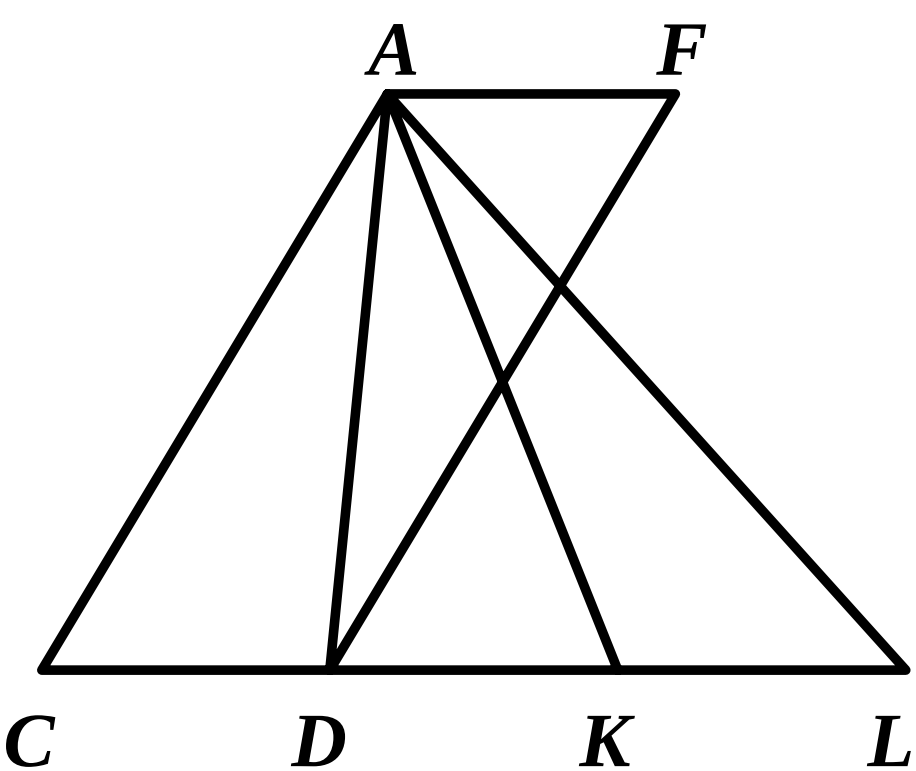


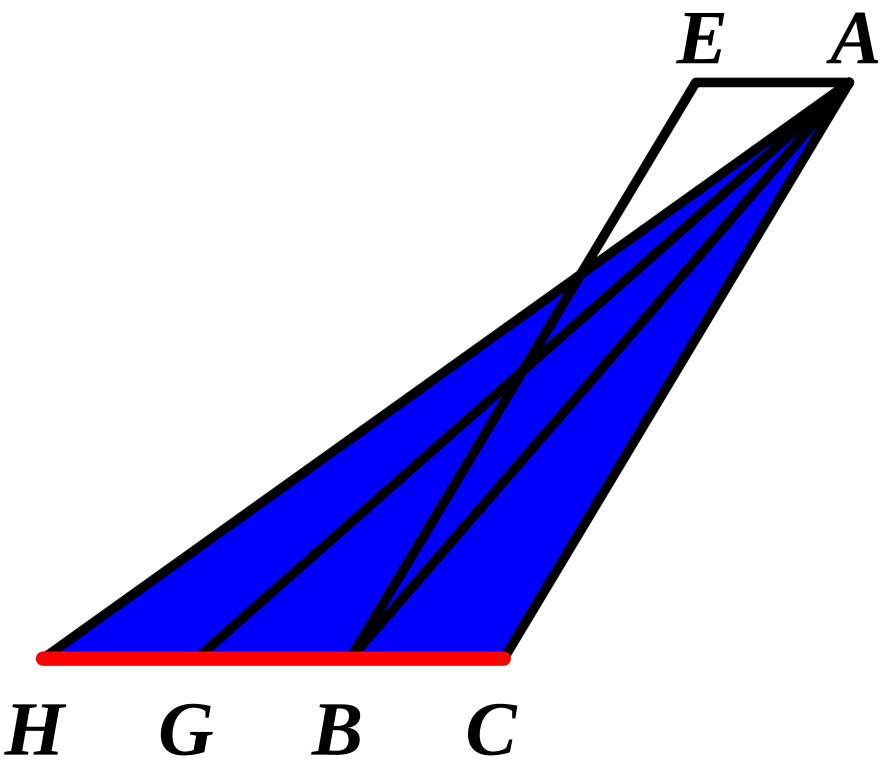






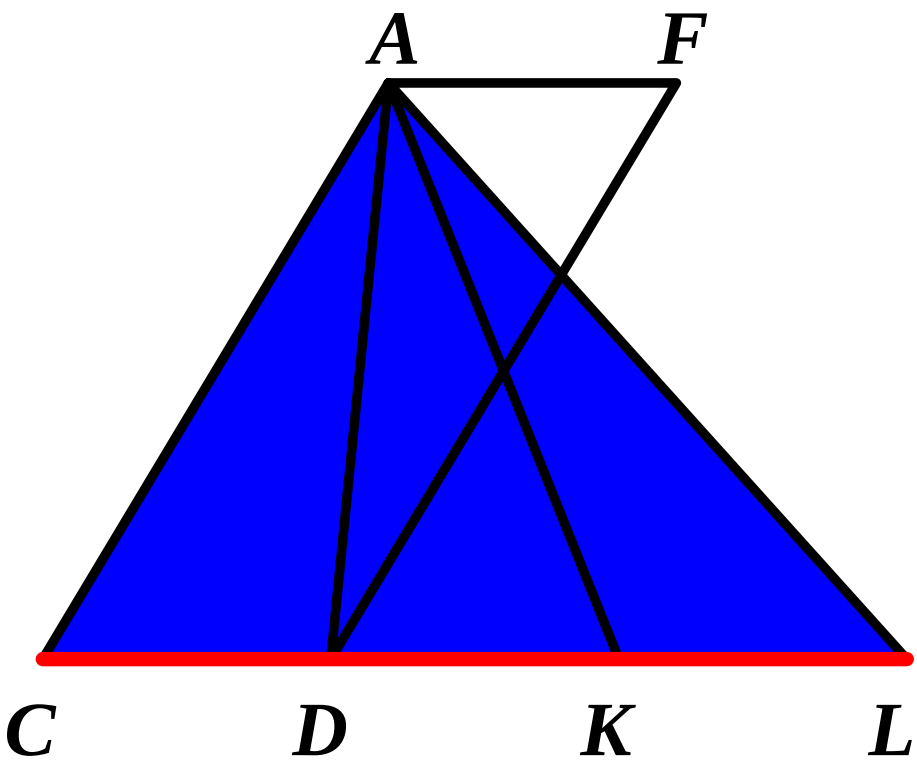

E
A
H
G
B
C

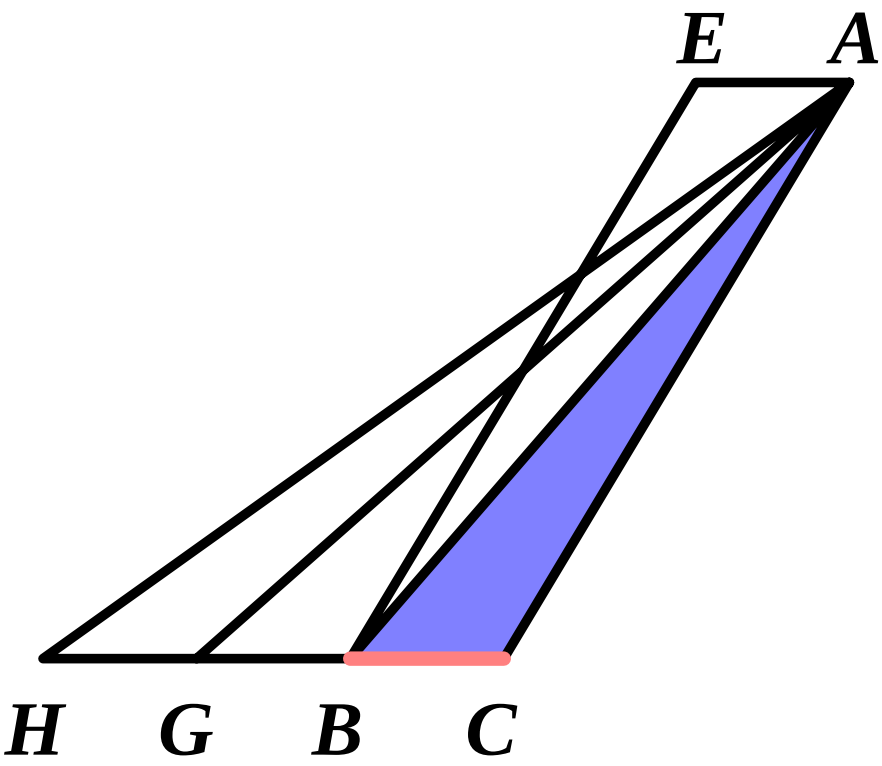

A
F
C
D
K
L



With the same height,

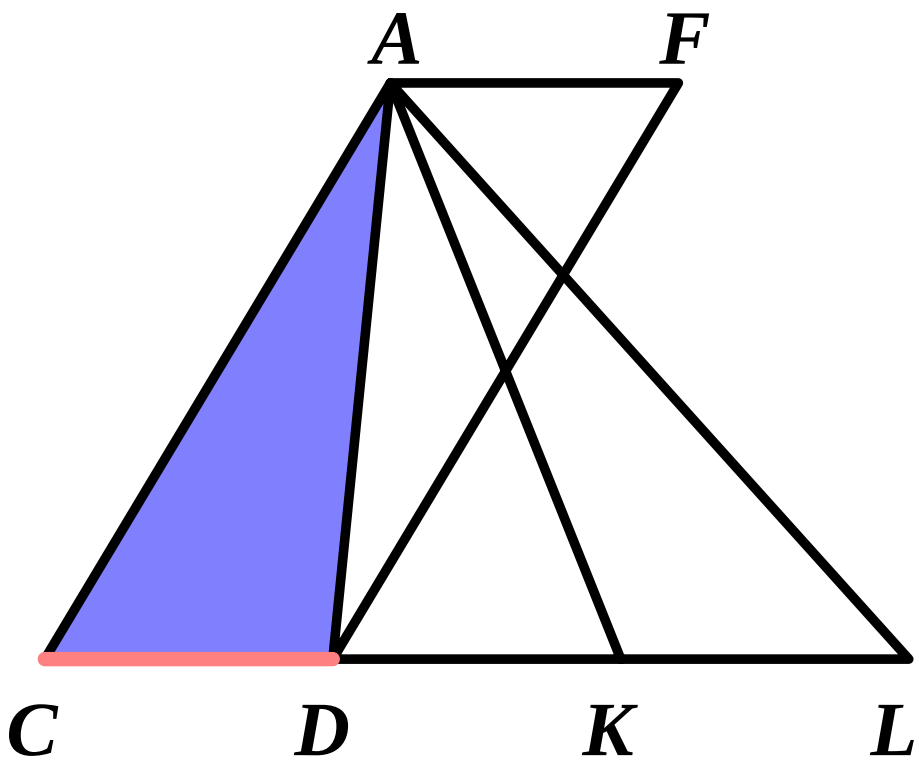
if $CH = CL$, *then* $ACH = ACL$

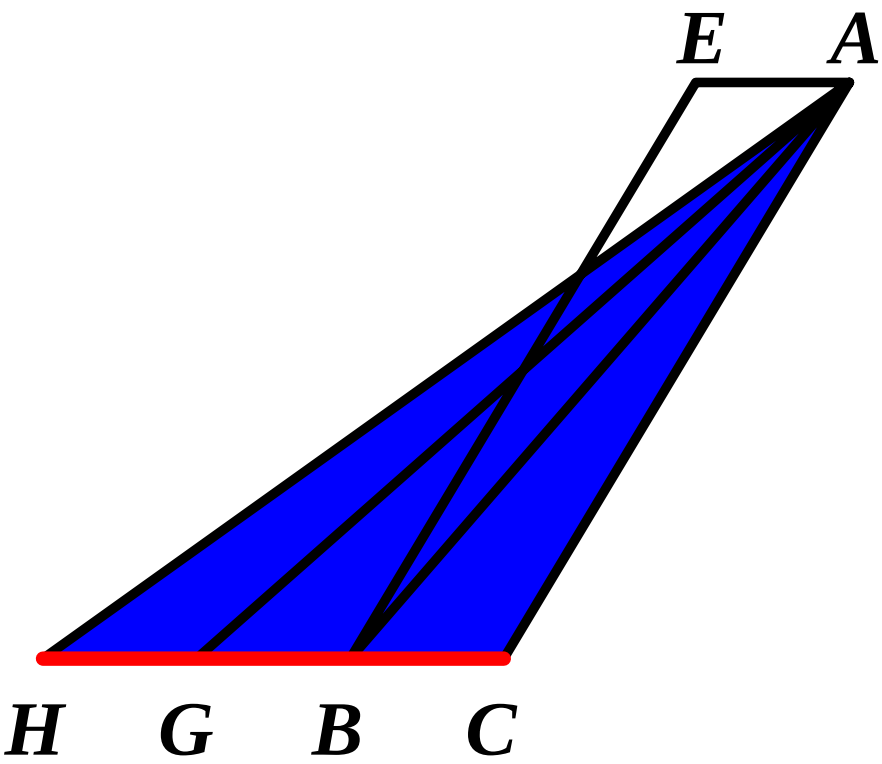




By Definition V.5, due to the same ratio,

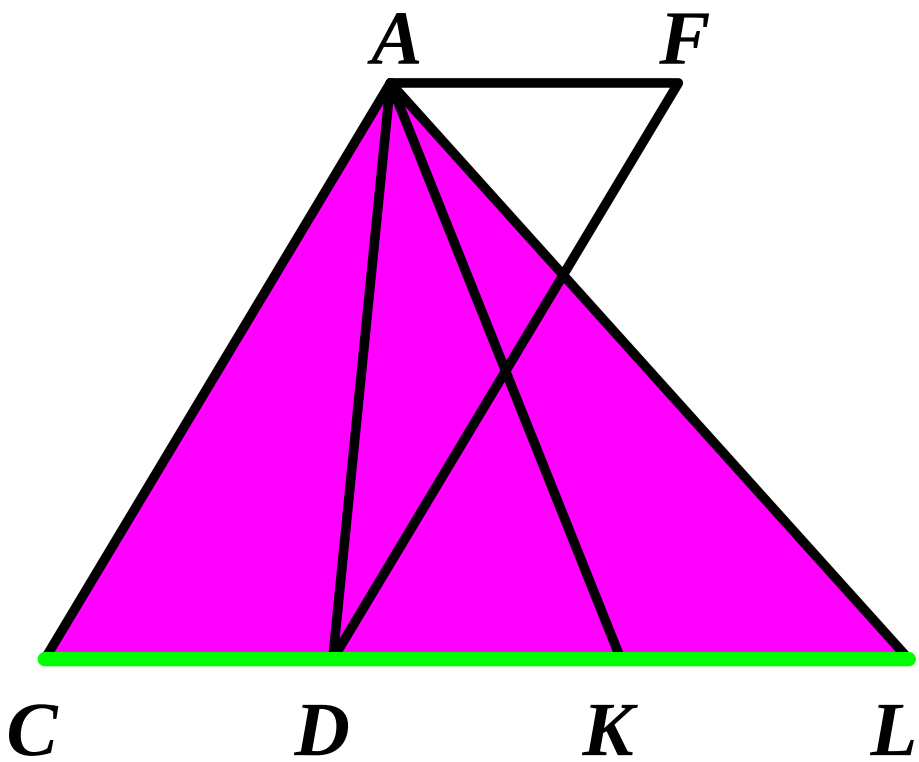
CB = *CD* *and* *ACB* = *ACD*

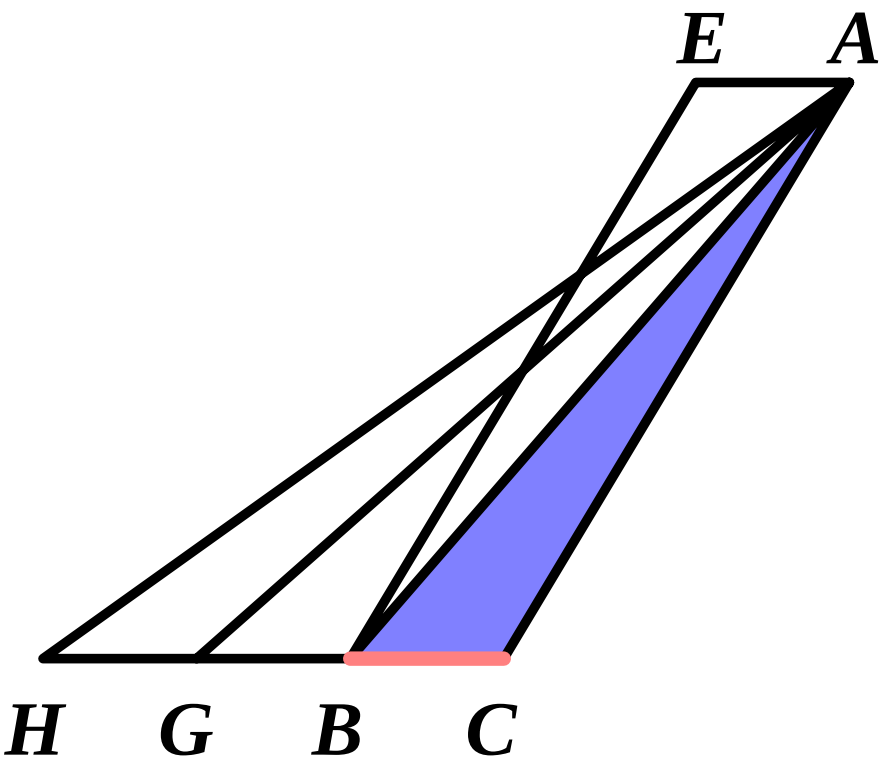




With the same height,

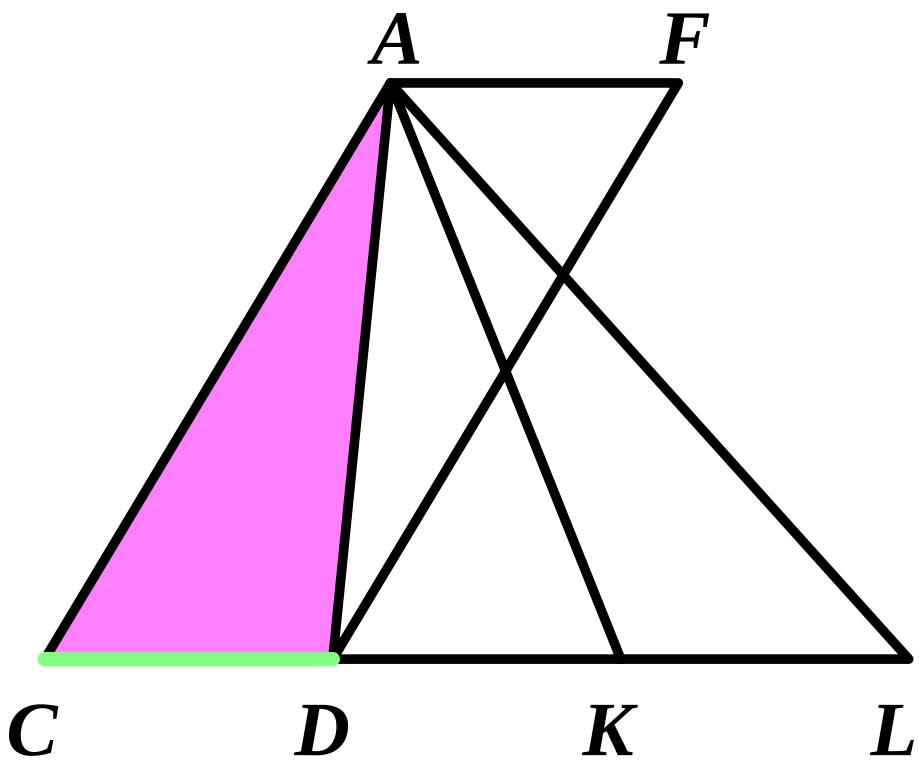
if $CH > CL$, *then* $ACH > ACL$

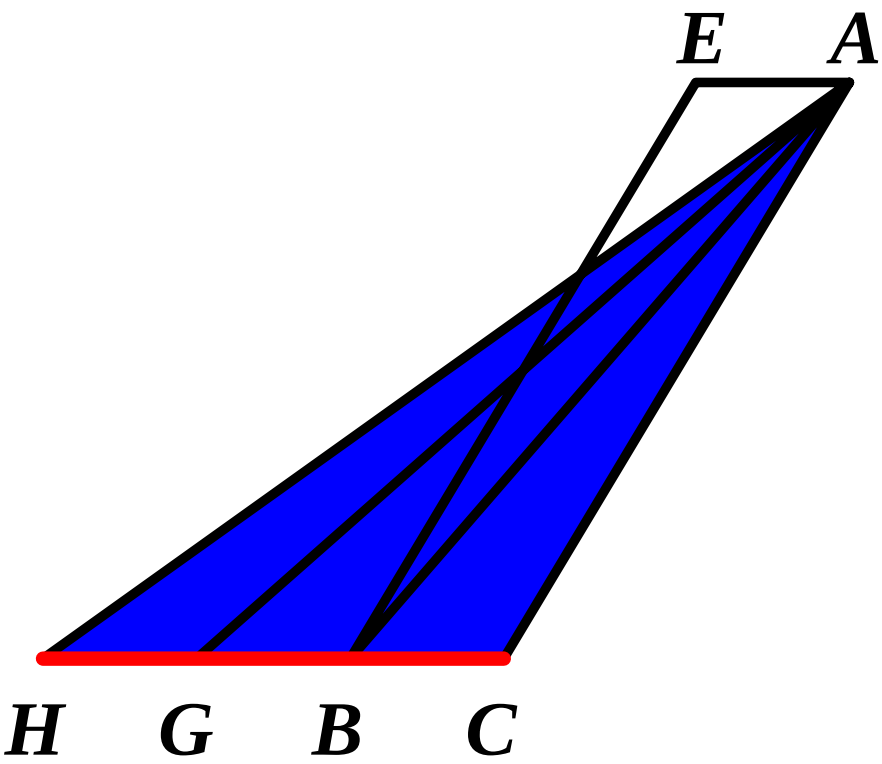




By Definition V.5, due to the same ratio,

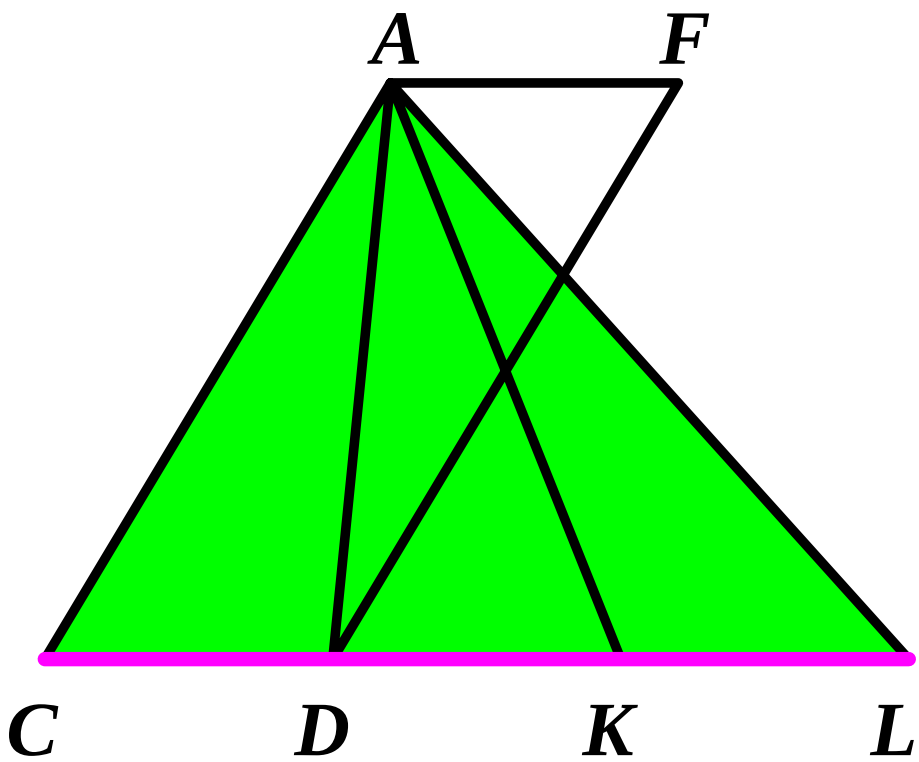
CB > *CD* *and* *ACB* > *ACD*

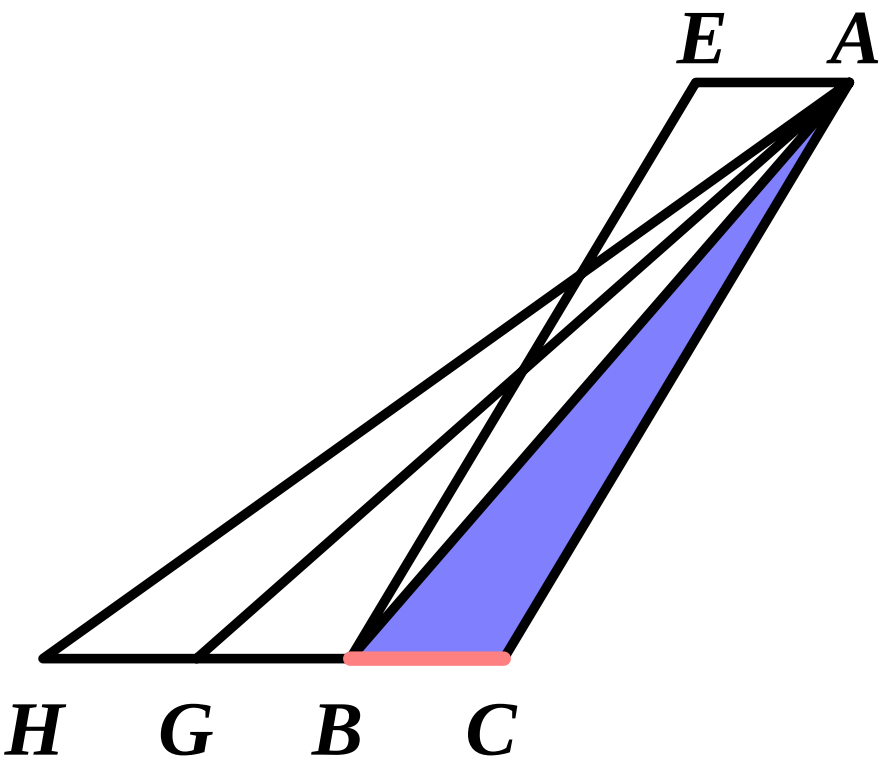




With the same height,

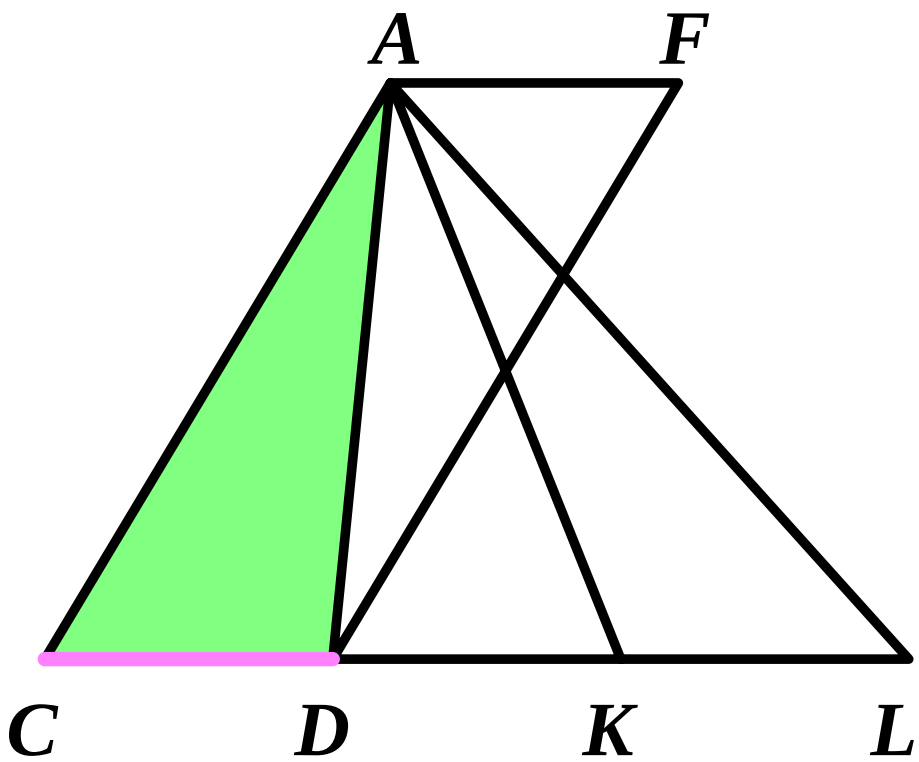
if $CH < CL$, *then* $ACH < ACL$

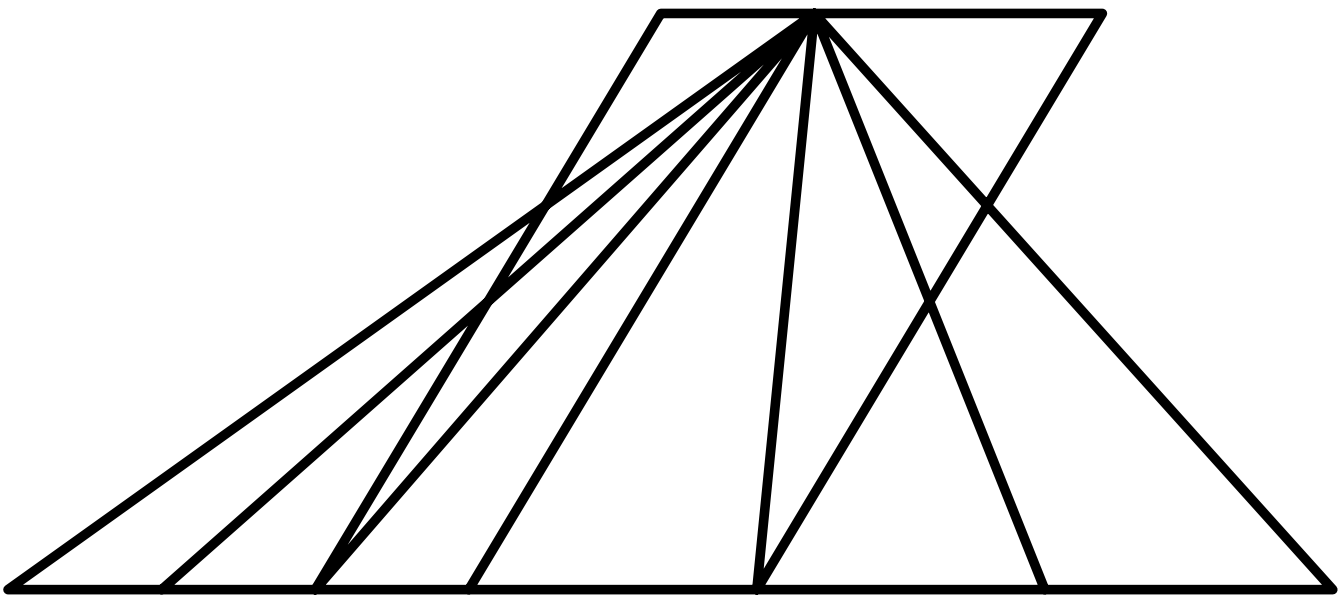


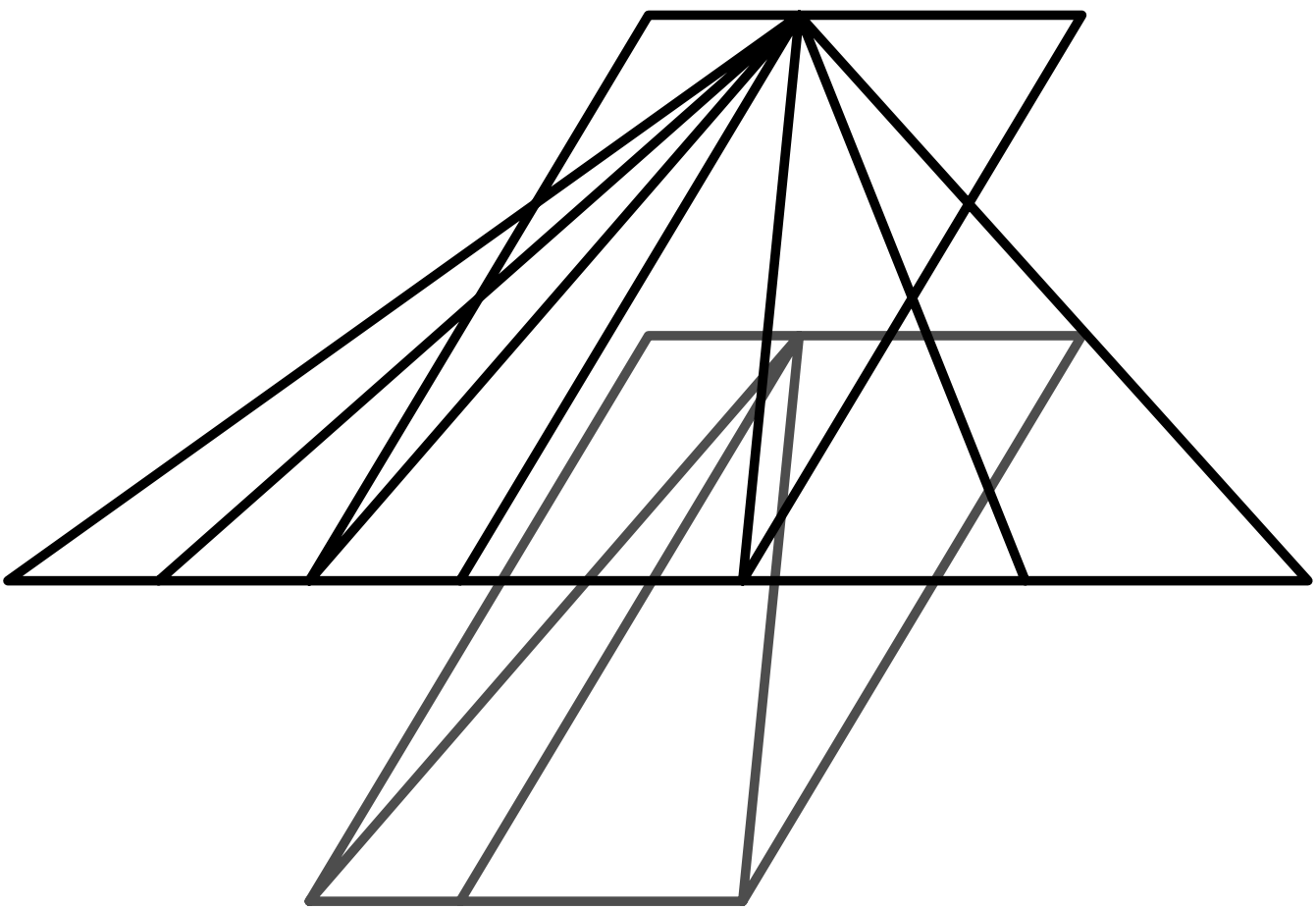


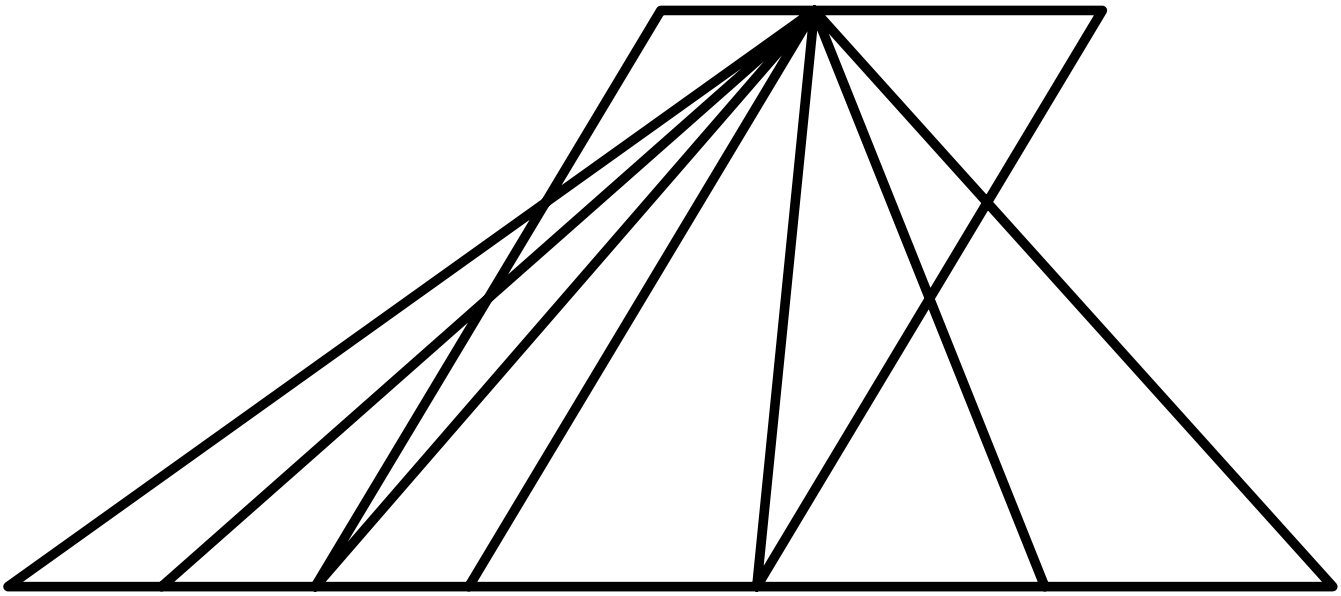
By Definition V.5, due to the same ratio,

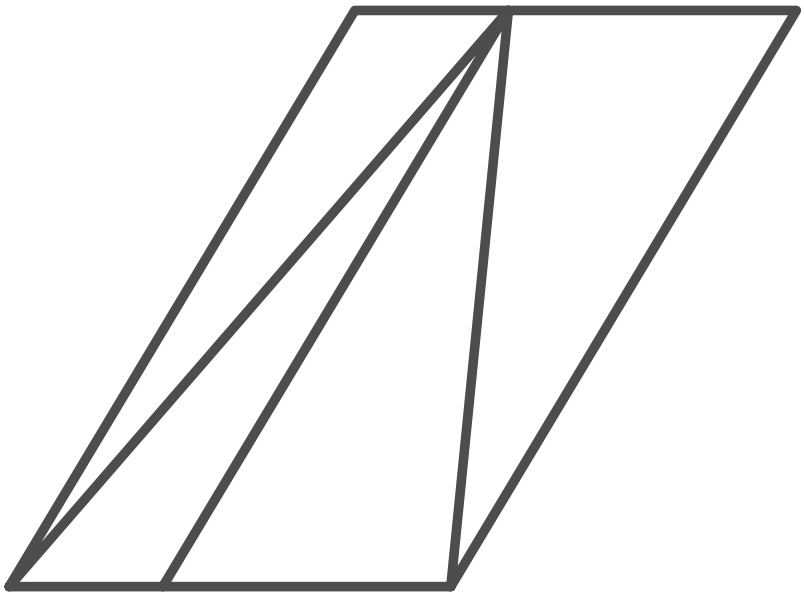
CB < *CD* *and* *ACB* < *ACD*

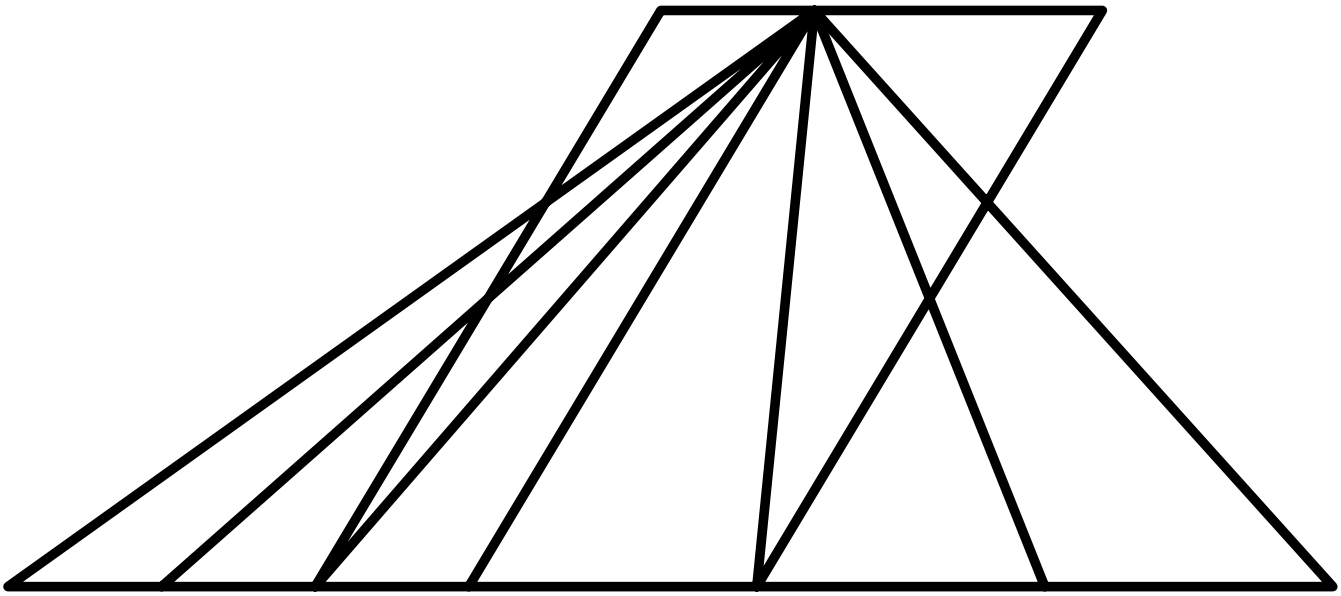


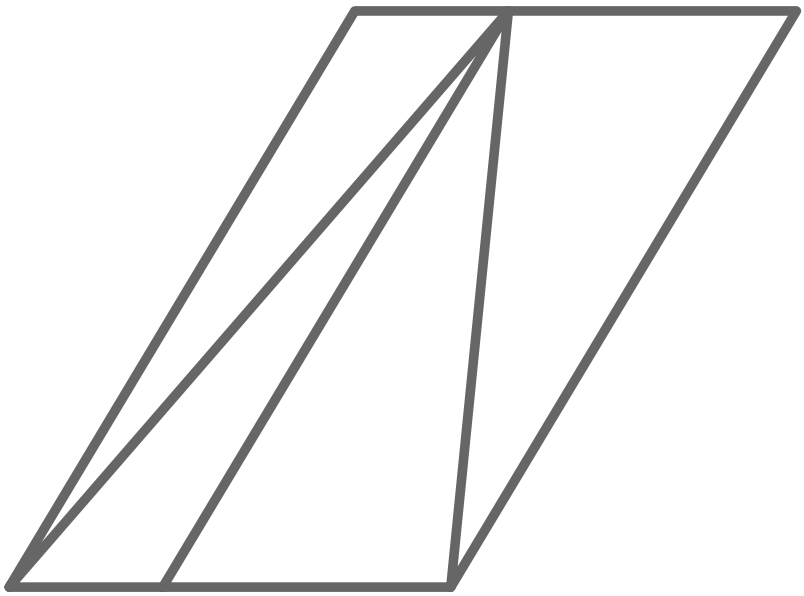


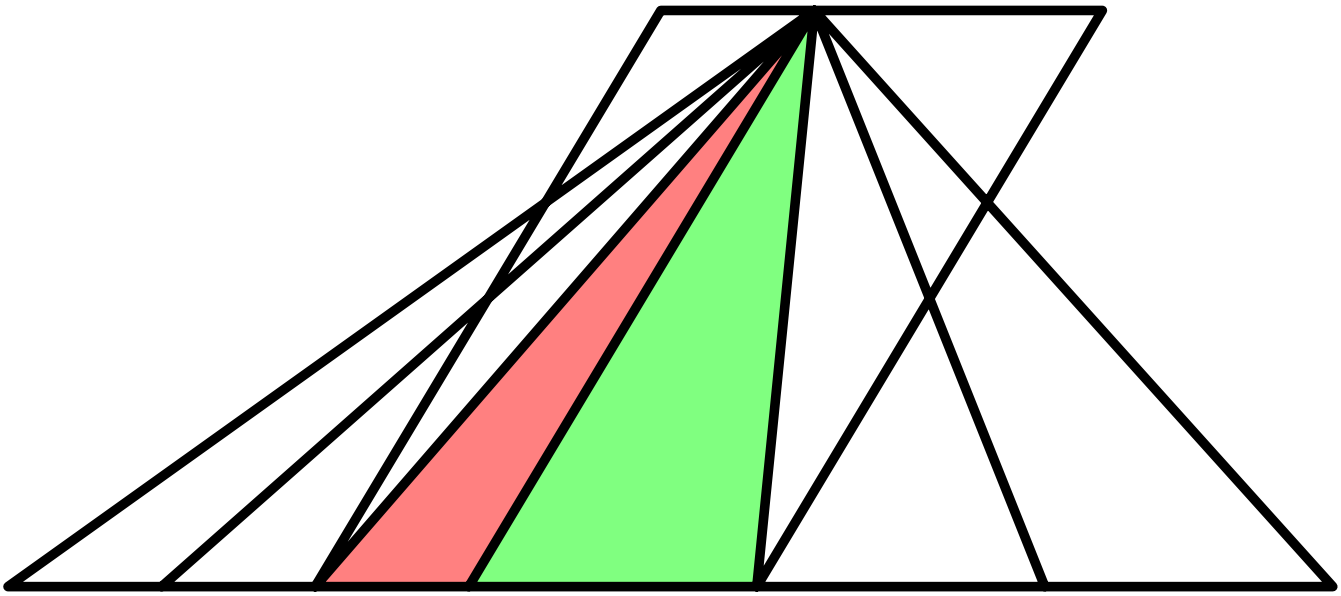


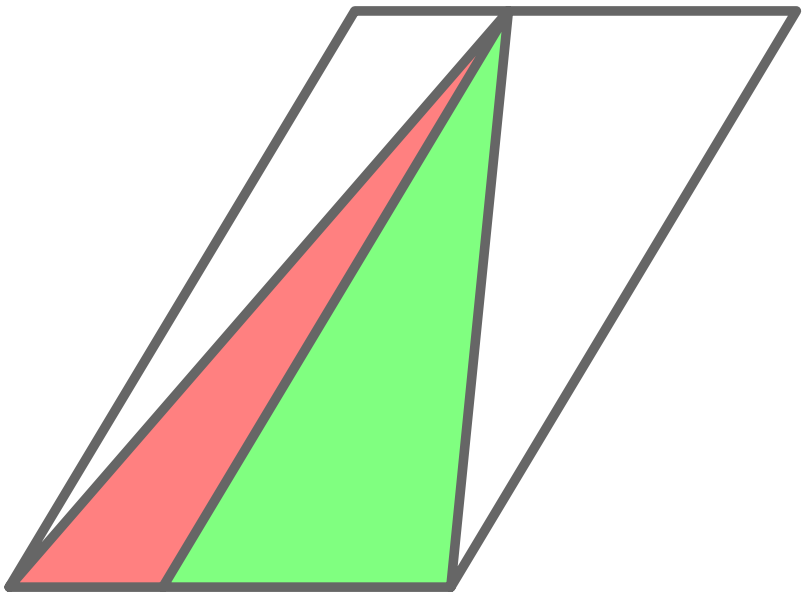


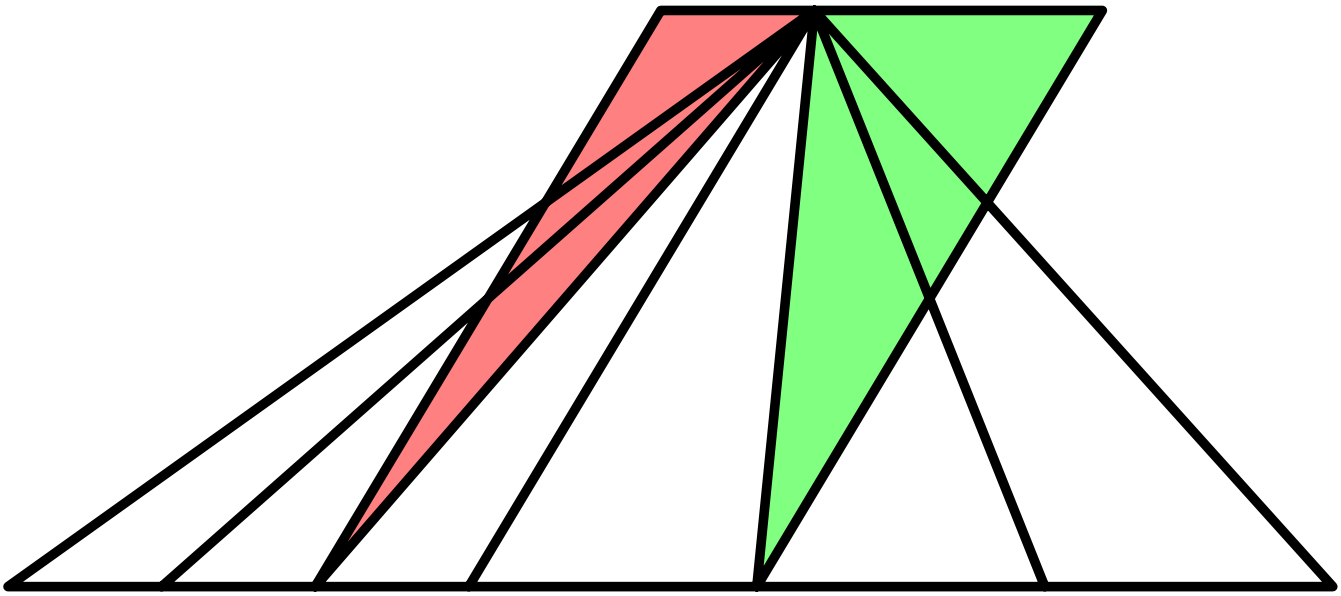


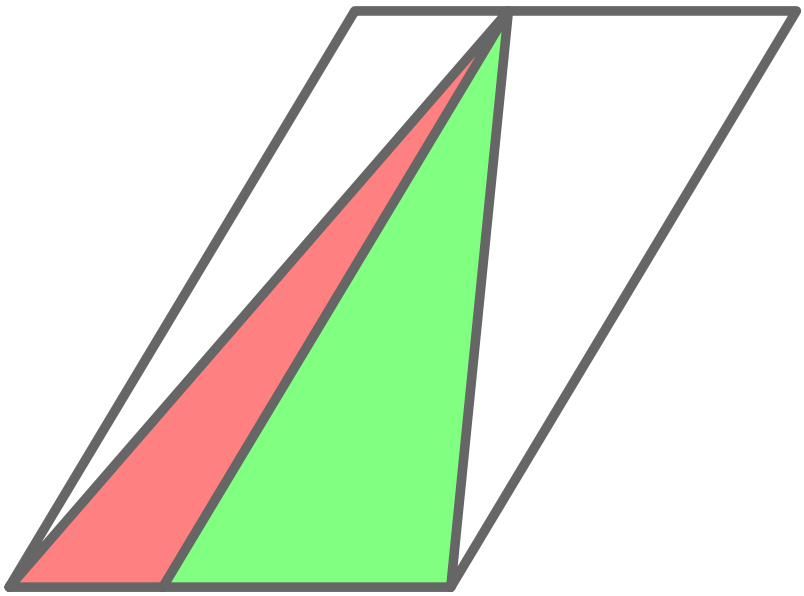


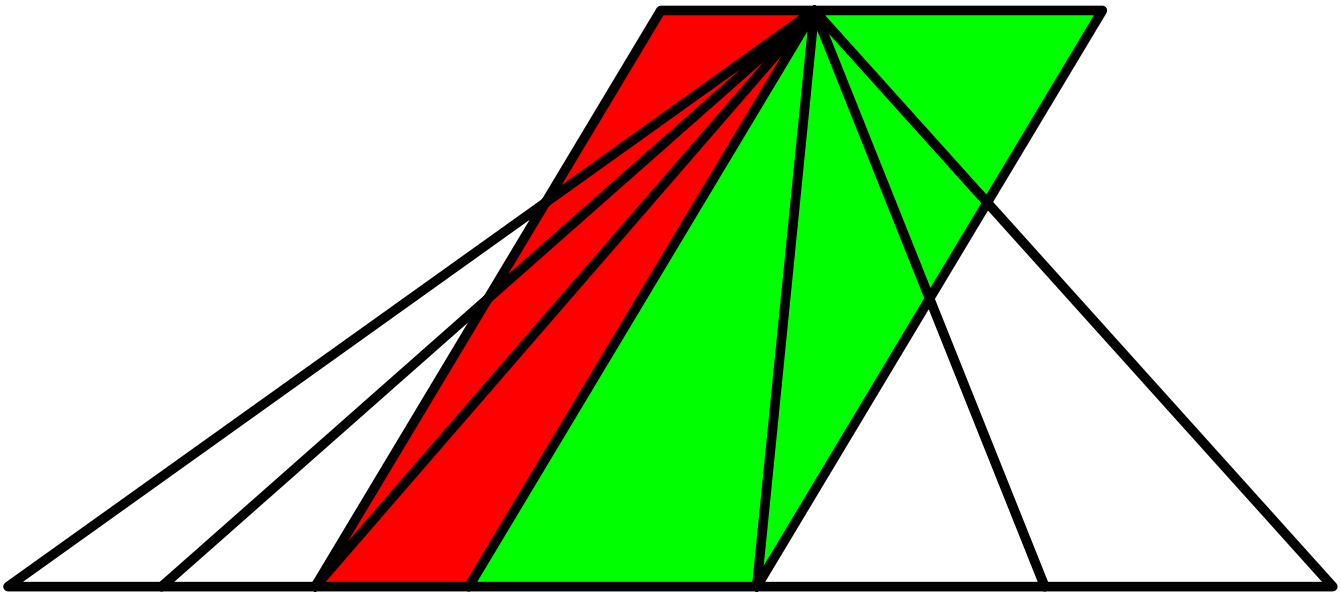


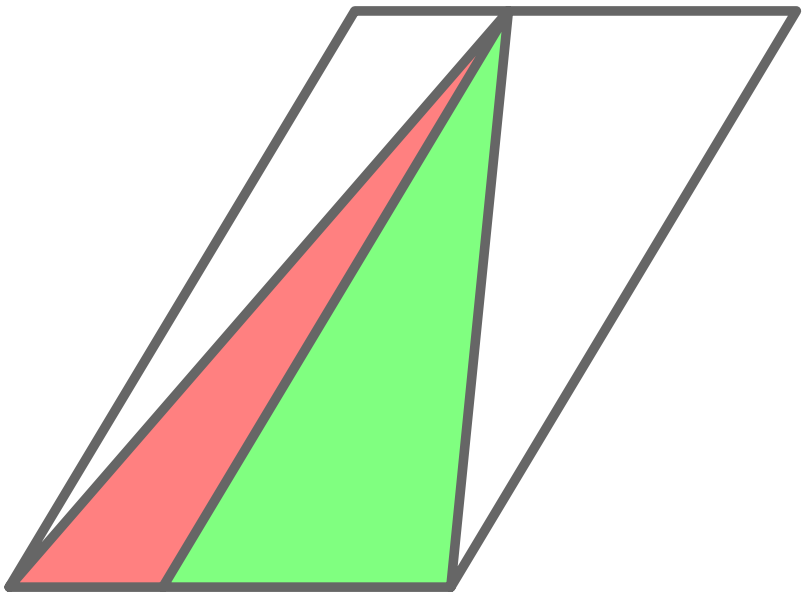


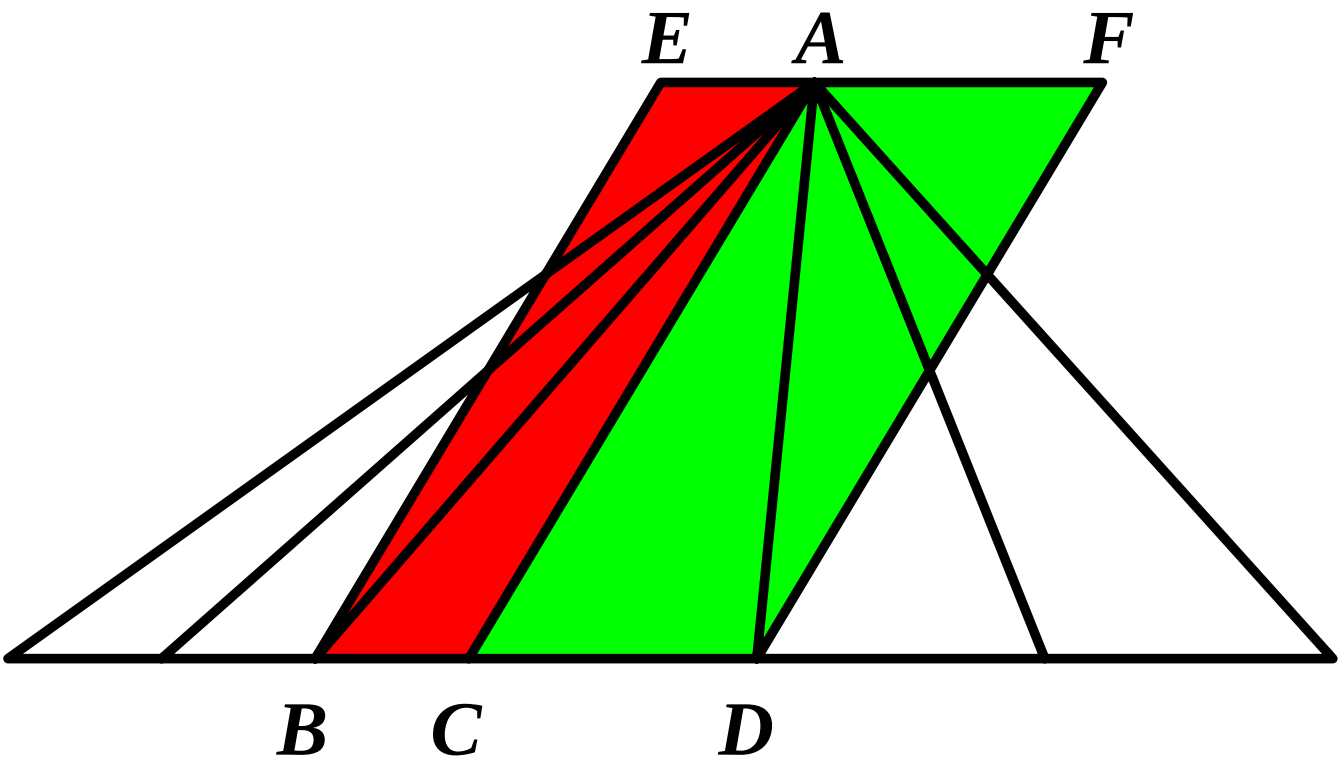




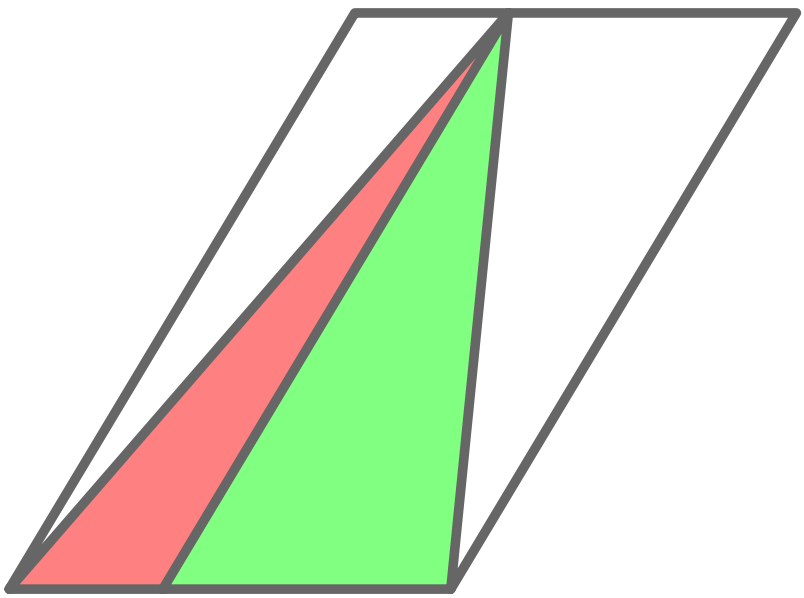


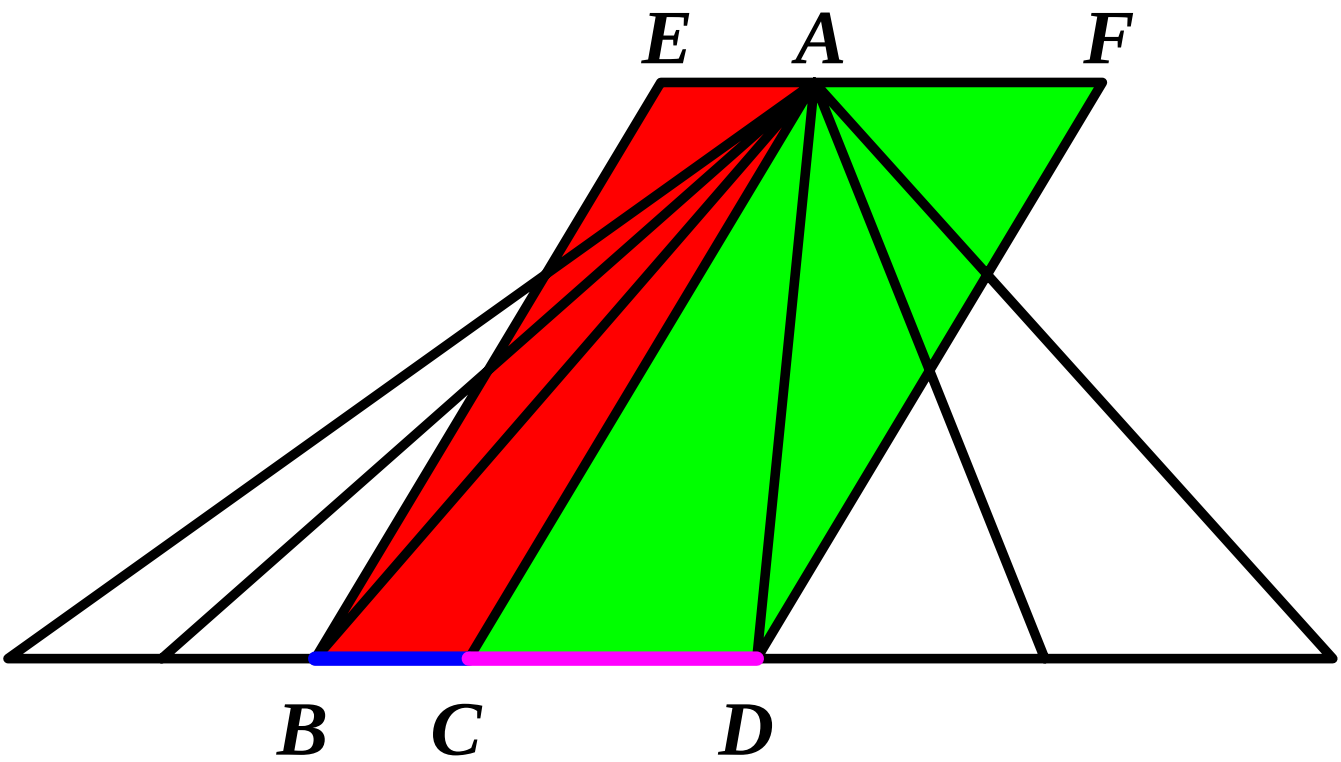






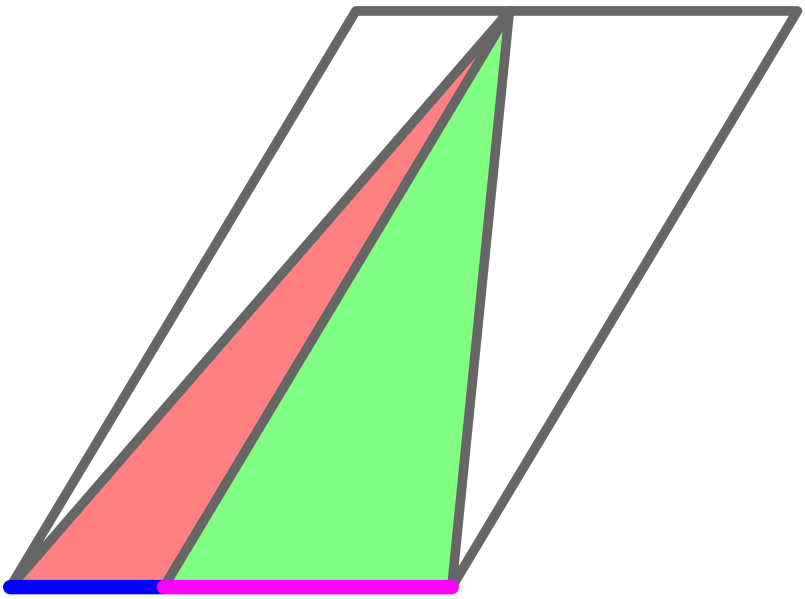
$ACB : ACD = EACB : FACD$

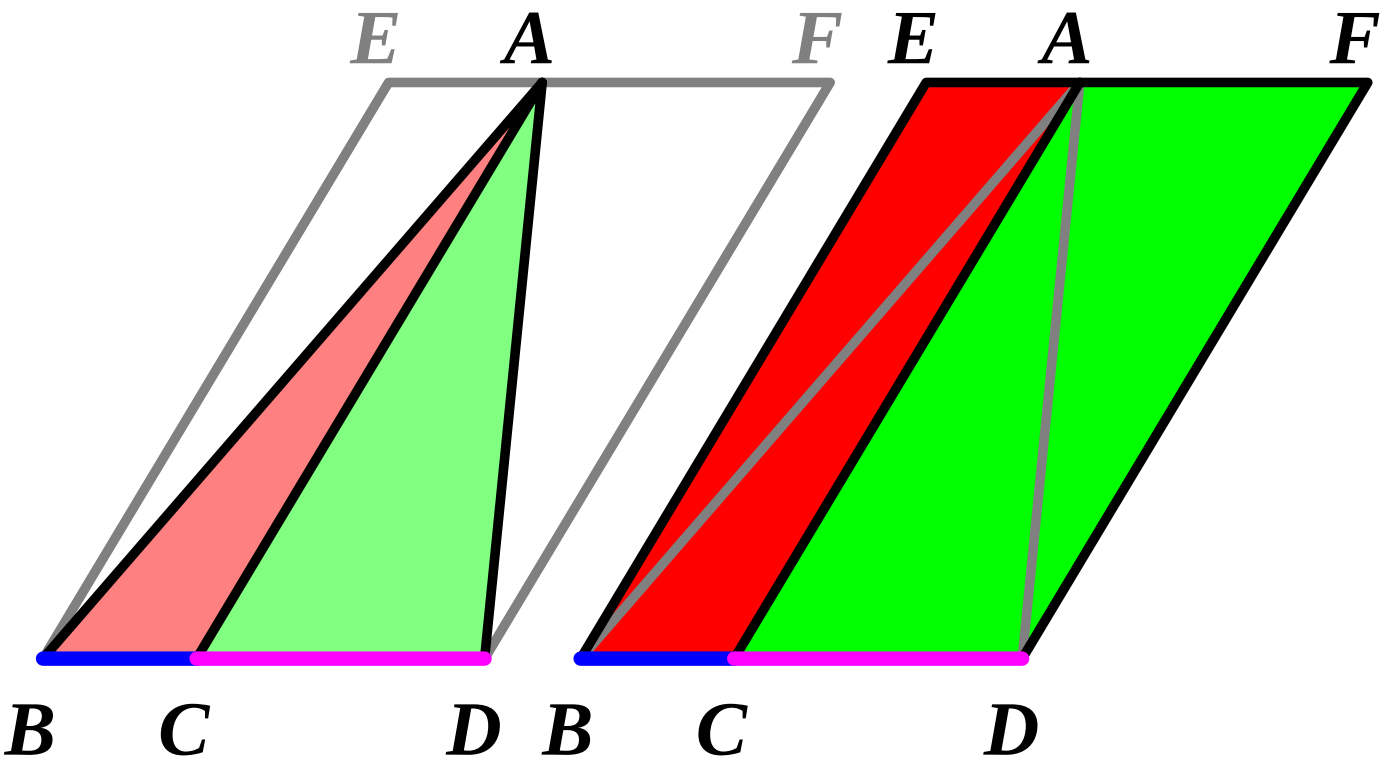




$ACB : ACD = EACB : FACD$

$CB : CD = ACB : ACD$





With the same height,

$$ACB : ACD = EACB : FACD = CB : CD$$

FIN