



EVROPSKÝ SOCIÁLNÍ FOND  
PRAHA & EU: INVESTUJEME DO VAŠÍ  
BUDOUCNOSTI

# Teoretické řešení střech

Deskriptivní geometrie II 2011/12

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# Postup řešení

Při teoretickém řešení budeme předpokládat (jestliže neurčíme jinak), že:

- Všechny okapy jedné budovy leží v jedné horizontální rovině
- Roviny střechy svírají s touto horizontální rovinou stejné úhly, jsou tedy téhož spádu, v našem případě platí  $\text{tg}\alpha = 1 = \text{tg}45^\circ$
- Každým okapem prochází jedna rovina střechy
- Ty hrany, přes které nesmí odtékat voda, zde například štít, vyznačujeme dvojitou nebo barevnou čarou

## Postup

1. Nejprve očíslováme okapové hrany, neboli půdorysné stopy střešních rovin.
2. Sestrojíme průměty průsečnic střešních rovin jako osy úhlů okapových hran.
3. Popíšeme průsečnice - čísla odpovídají číslům přilehlých okapových hran.
4. Určíme sběžiště, tedy bod patřící třem rovinám.
5. Postupujeme od nejkratšího okapu a zachováváme uvedená pravidla.

Jestliže na některou část budovy nesmí stékat voda ze střechy např. štít, vyznačíme to na obrázku okapových hran zdvojenou nebo barevnou čarou. Říkáme, že na této části budovy je zakázaný okap. Je třeba si uvědomit, že v této části nebude potom okap, ale svislá vertikální zeď. Vodu ze zakázané části odvedeme použitím dalších pomocných střešních rovin

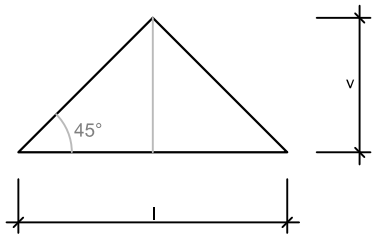
# Dělení střech podle spádu

l - rozpon střechy

v - výška střechy

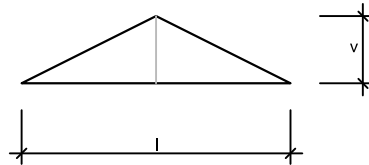
Střecha úhlová

$$v = \frac{1}{2}l$$



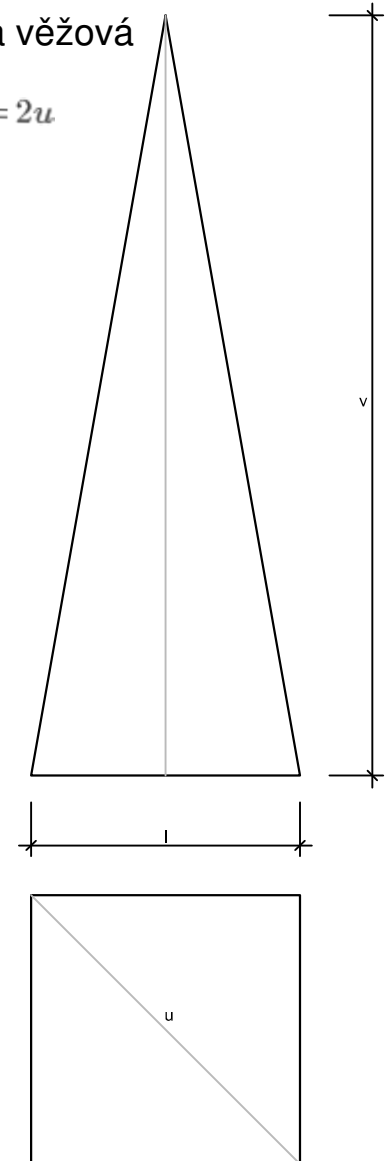
Střecha vlašská

$$v = \frac{1}{4} \div \frac{1}{5}l$$



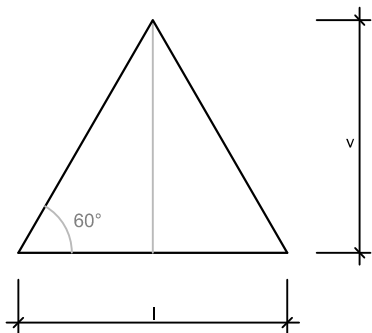
Střecha věžová

$$v = 2u$$



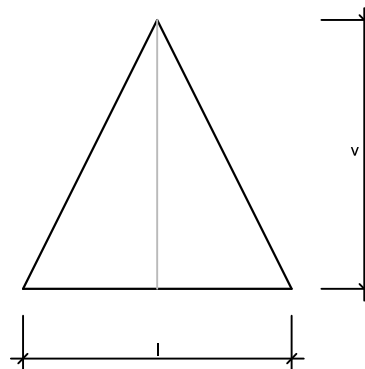
Střecha francouzská

$$v = \frac{\sqrt{3}}{2}l$$



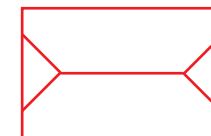
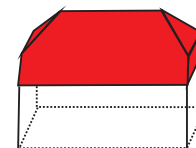
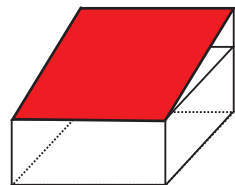
Střecha gotická

$$v = l$$

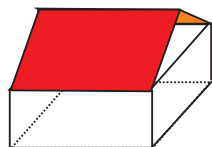


# Rozdělení střech podle počtu a polohy střešních rovin

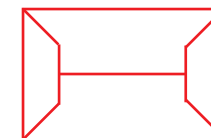
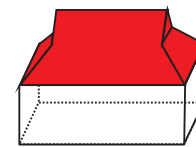
Pultová



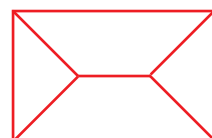
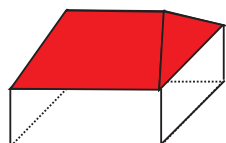
Sedlová



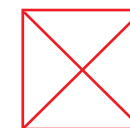
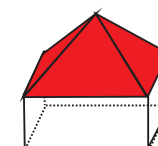
Polovalbová



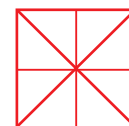
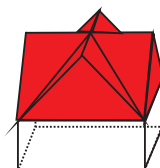
Valbová



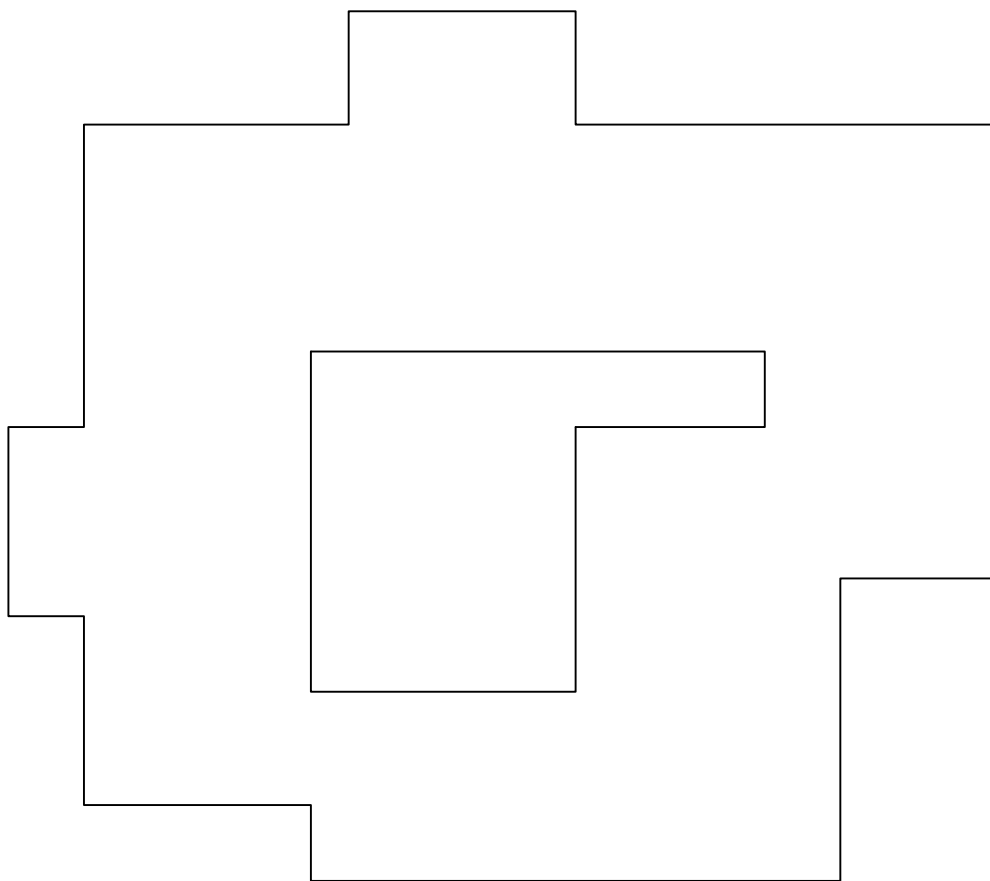
Stanová

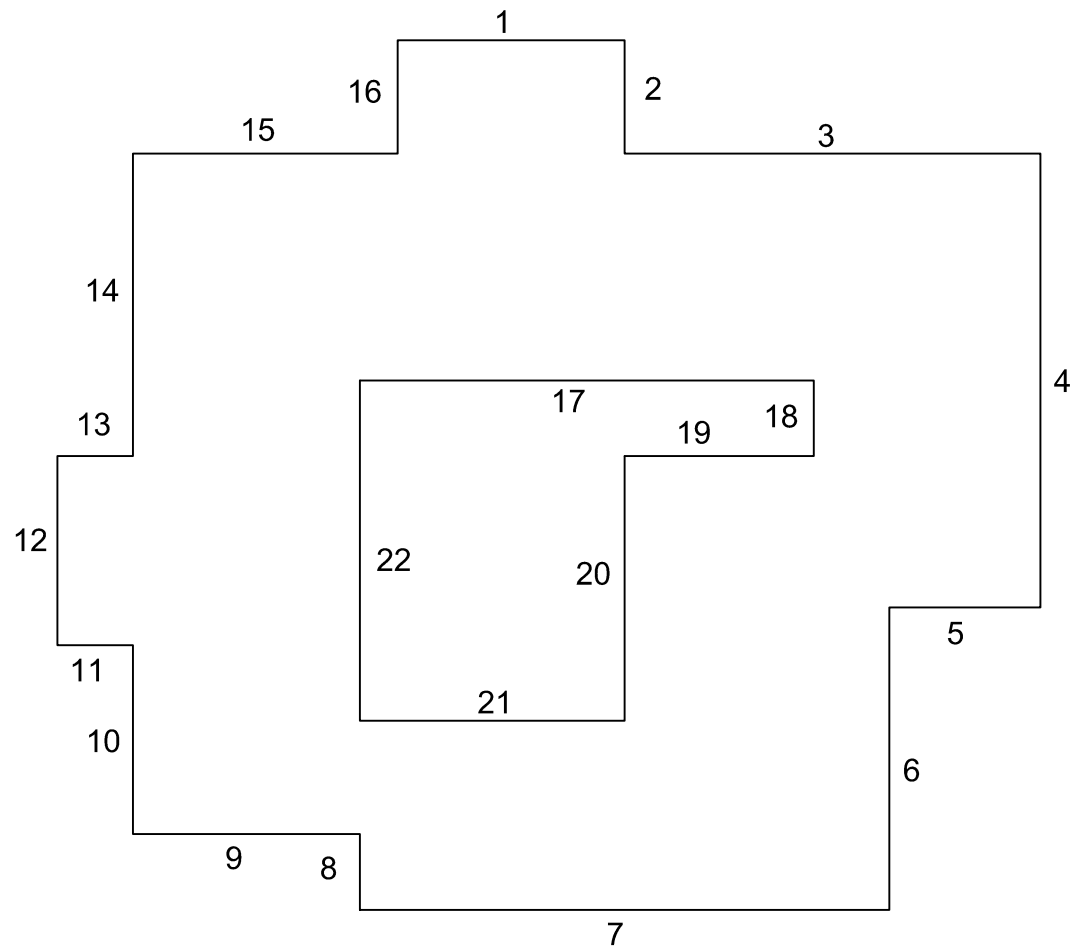


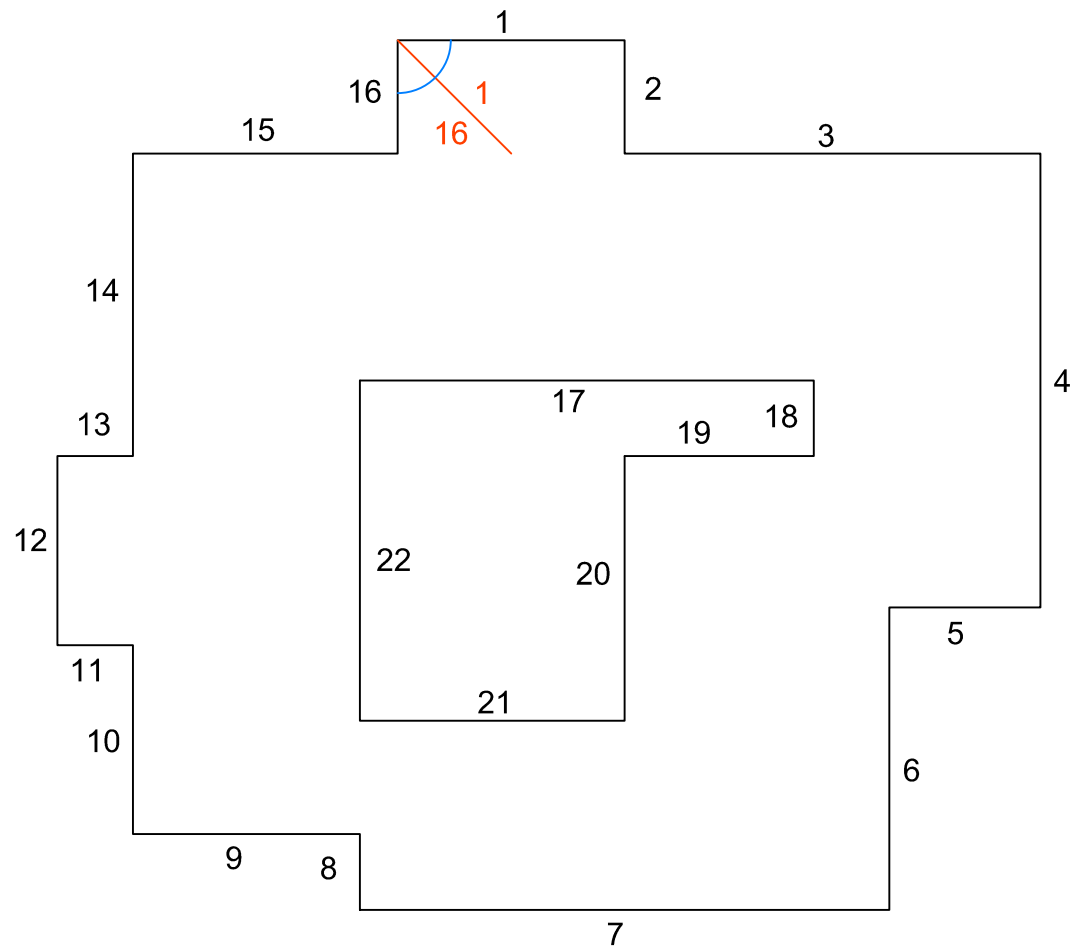
Křížová



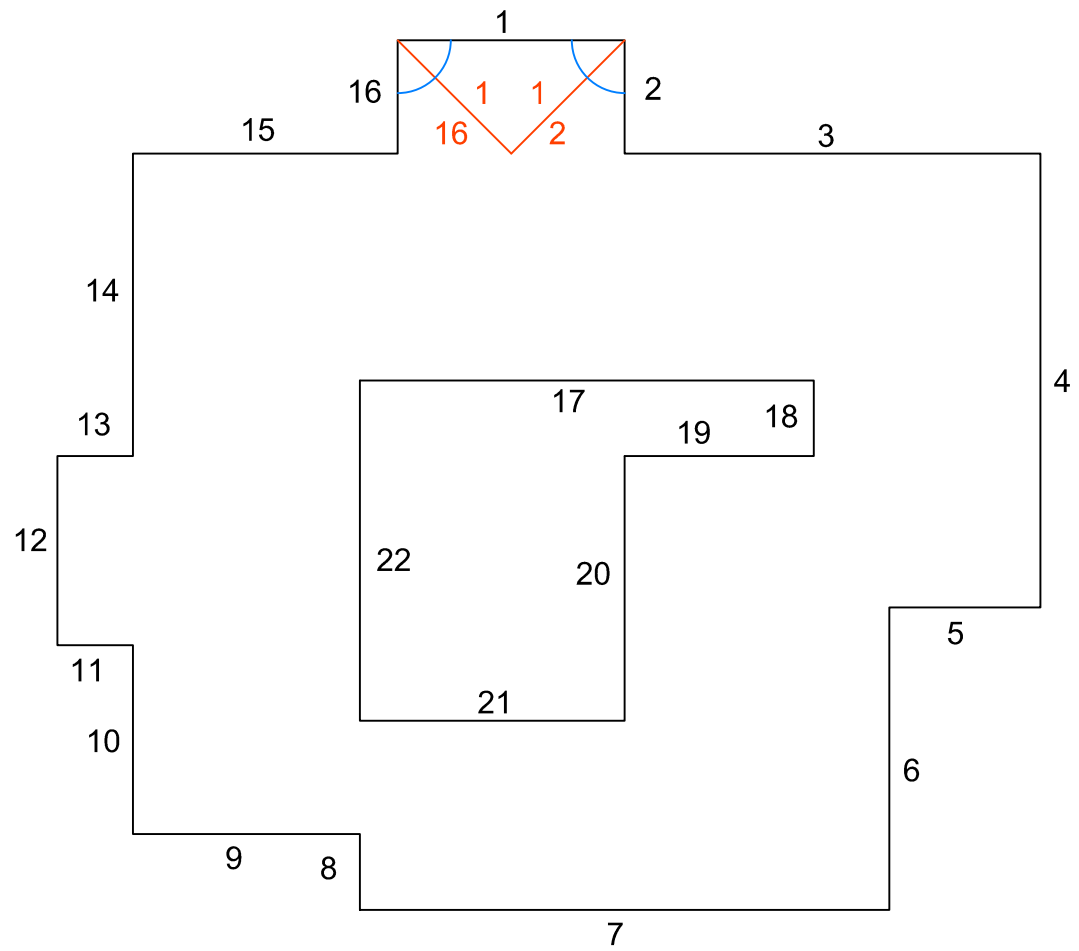
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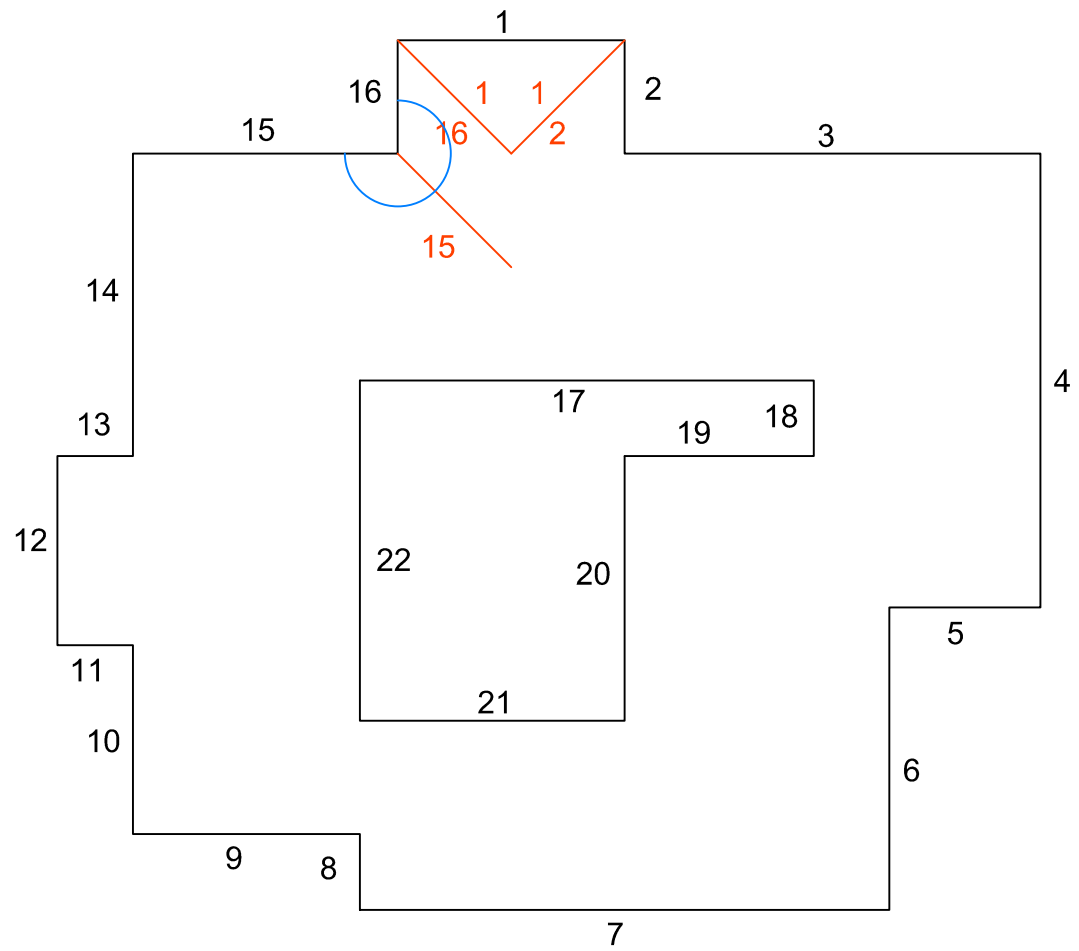


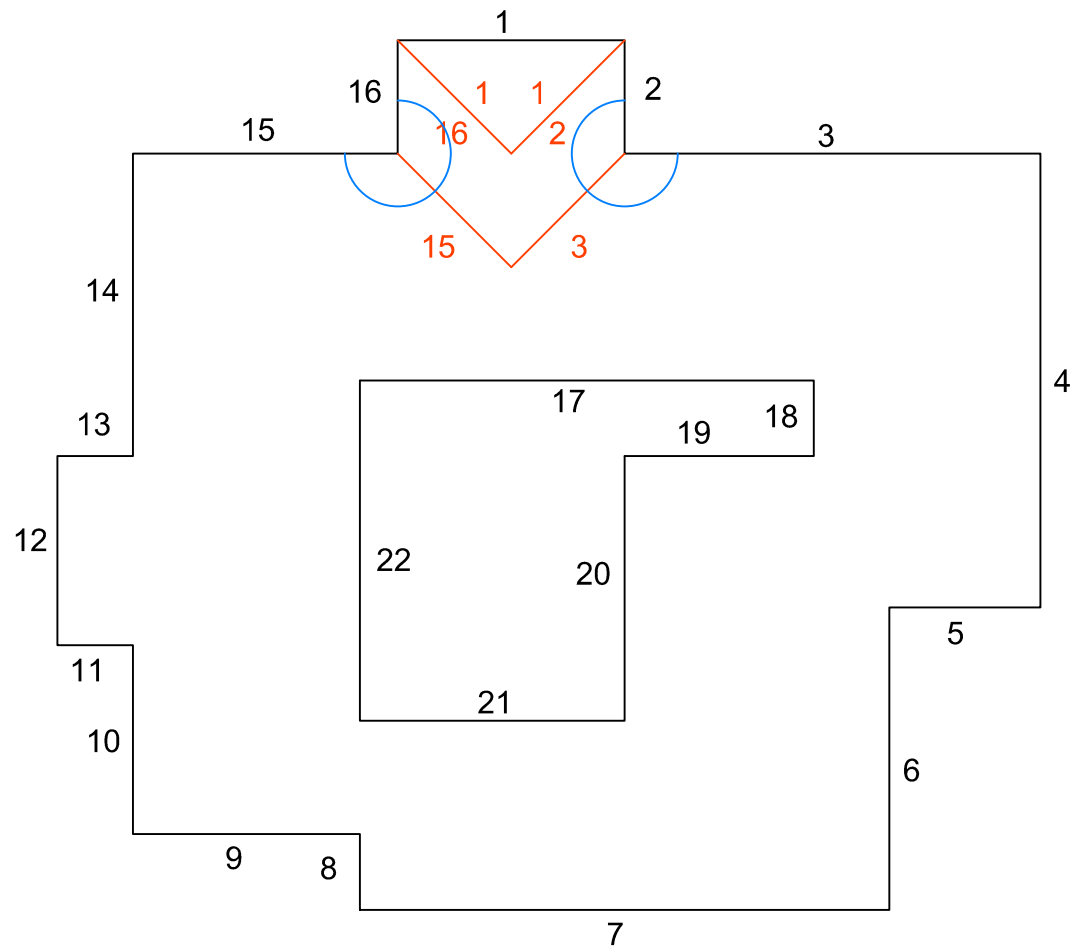


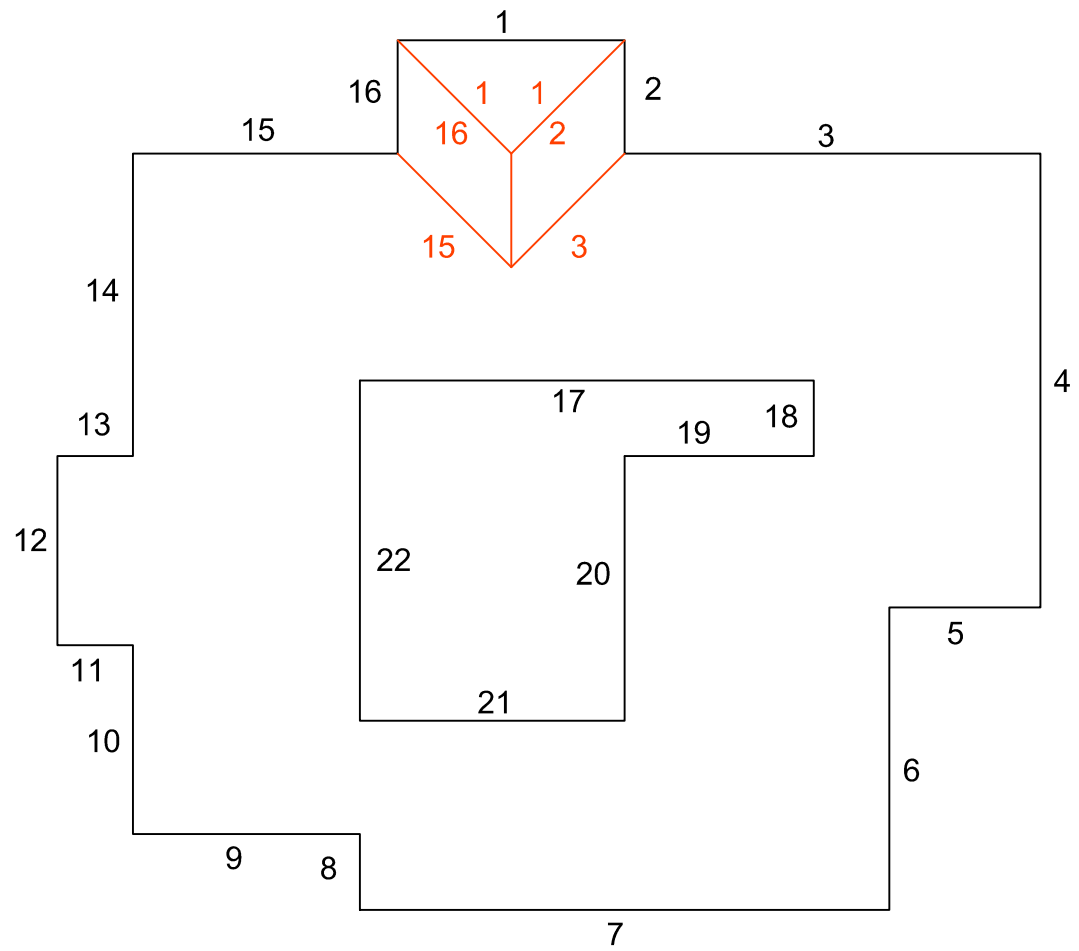


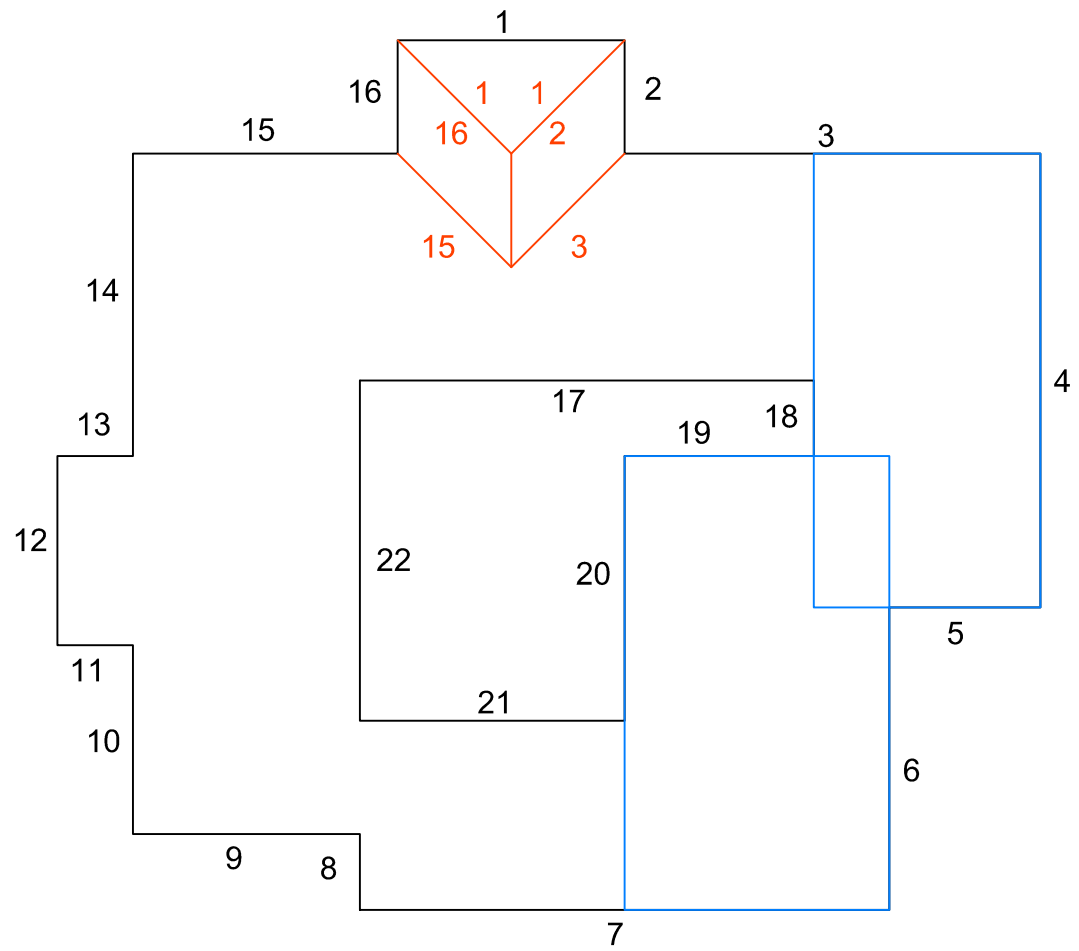


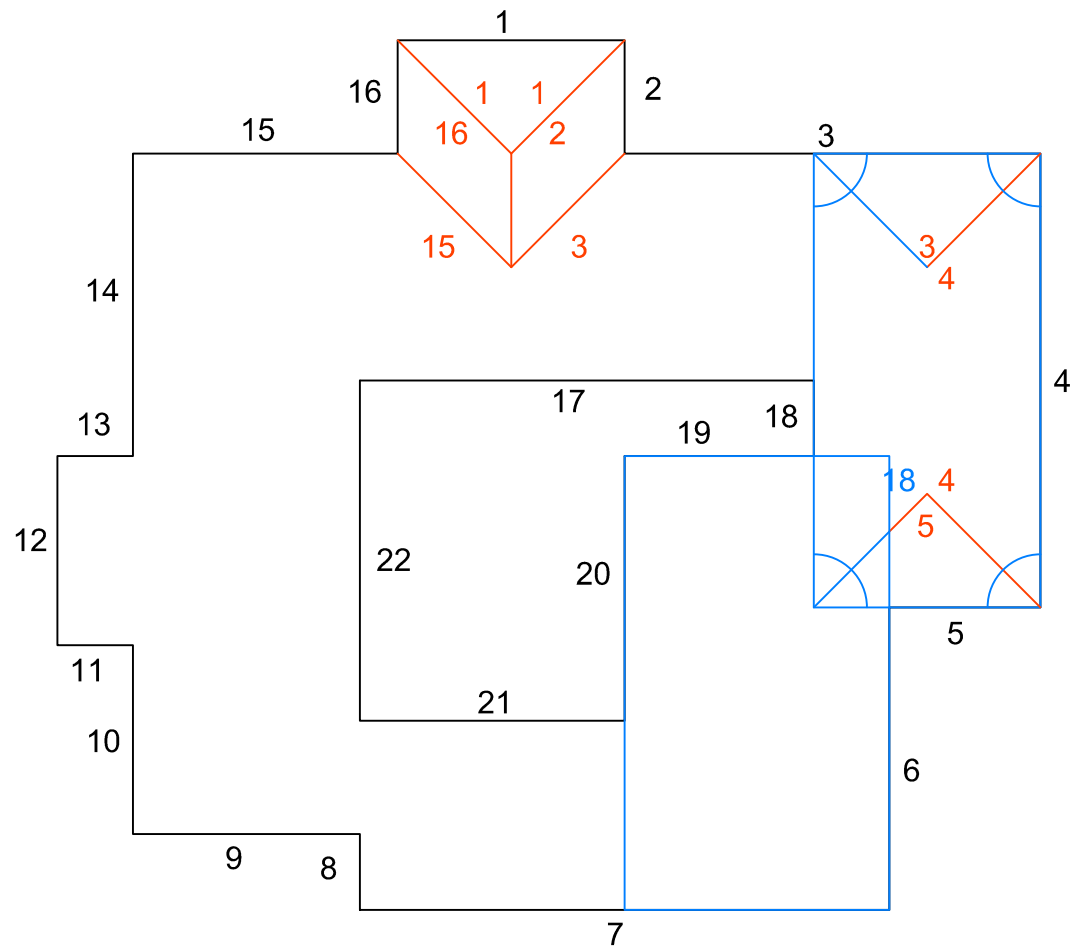


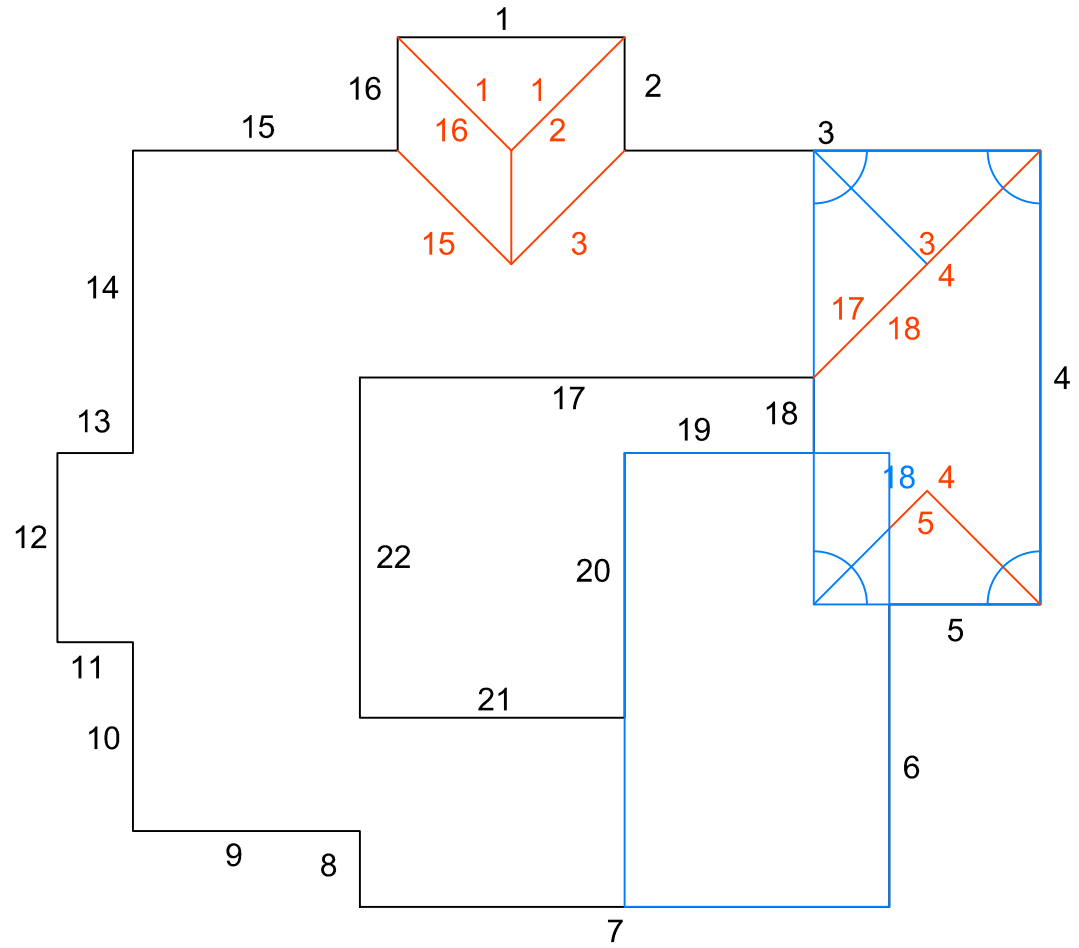


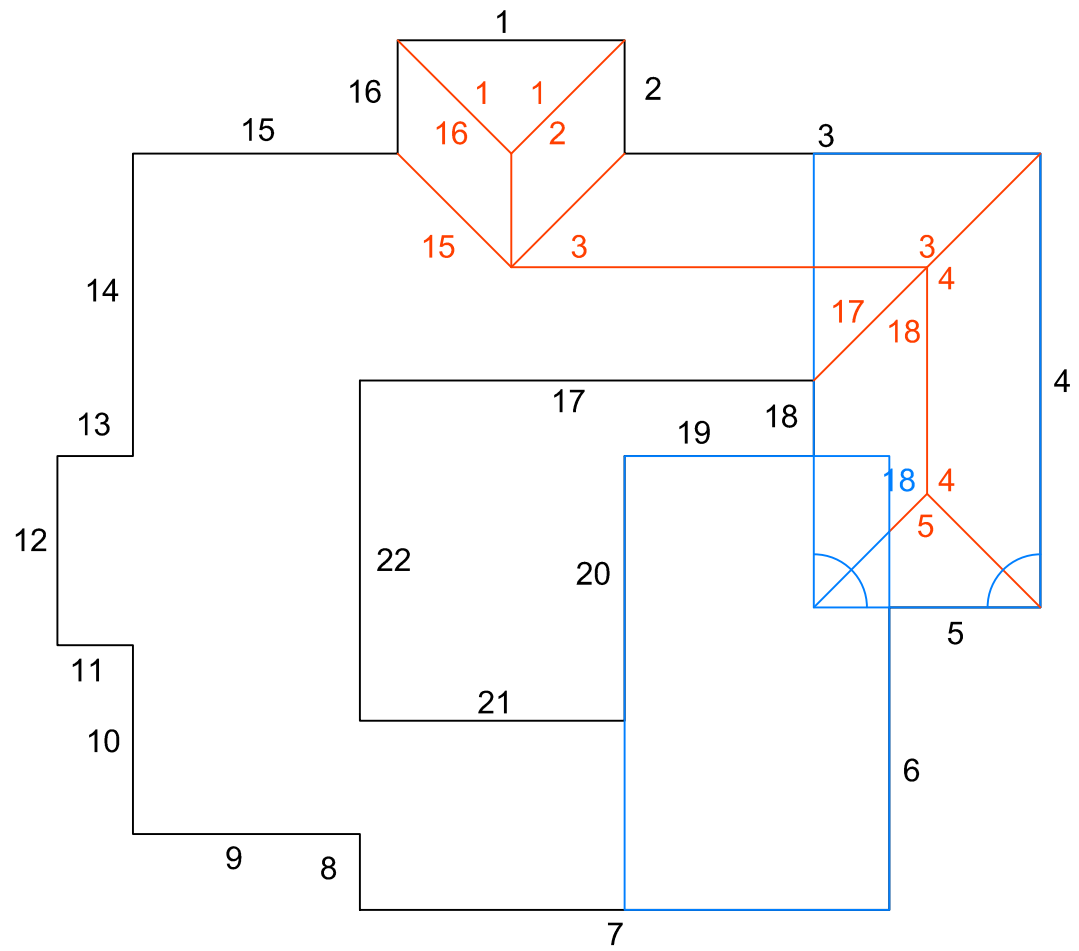




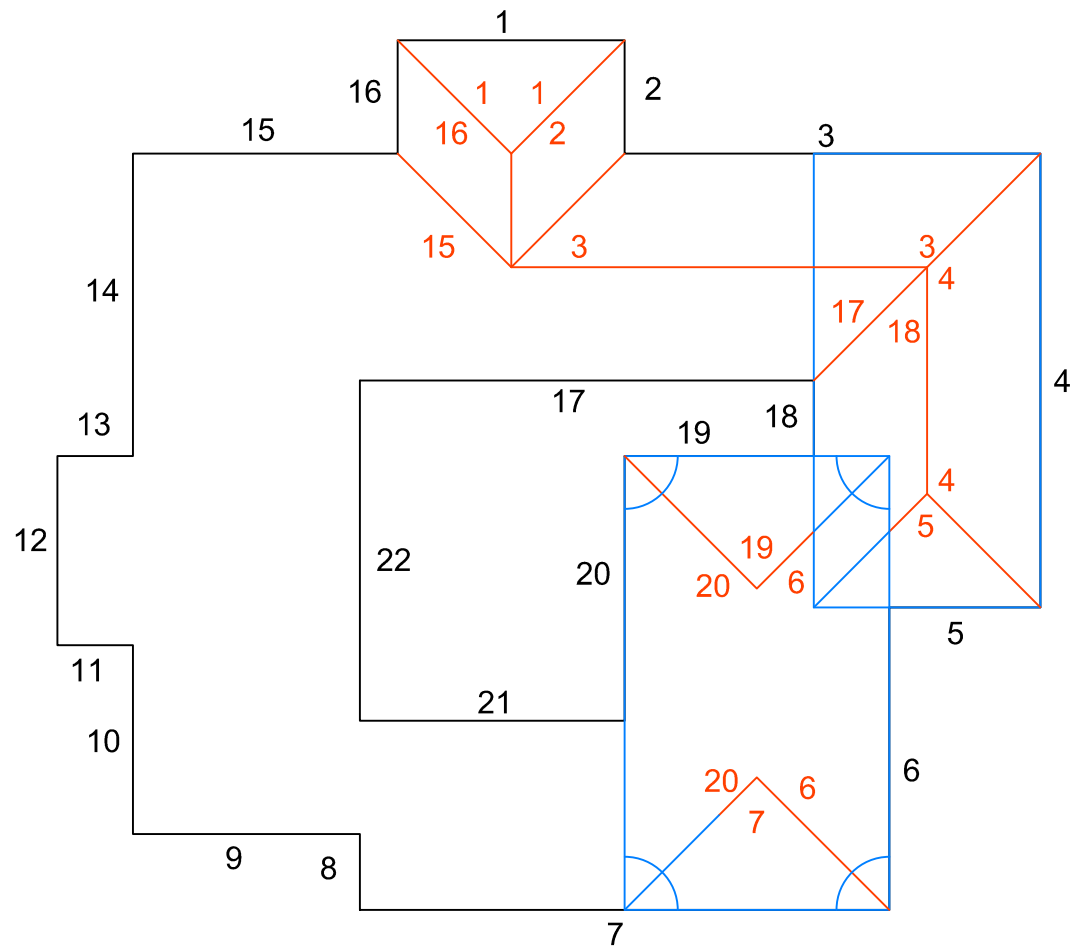


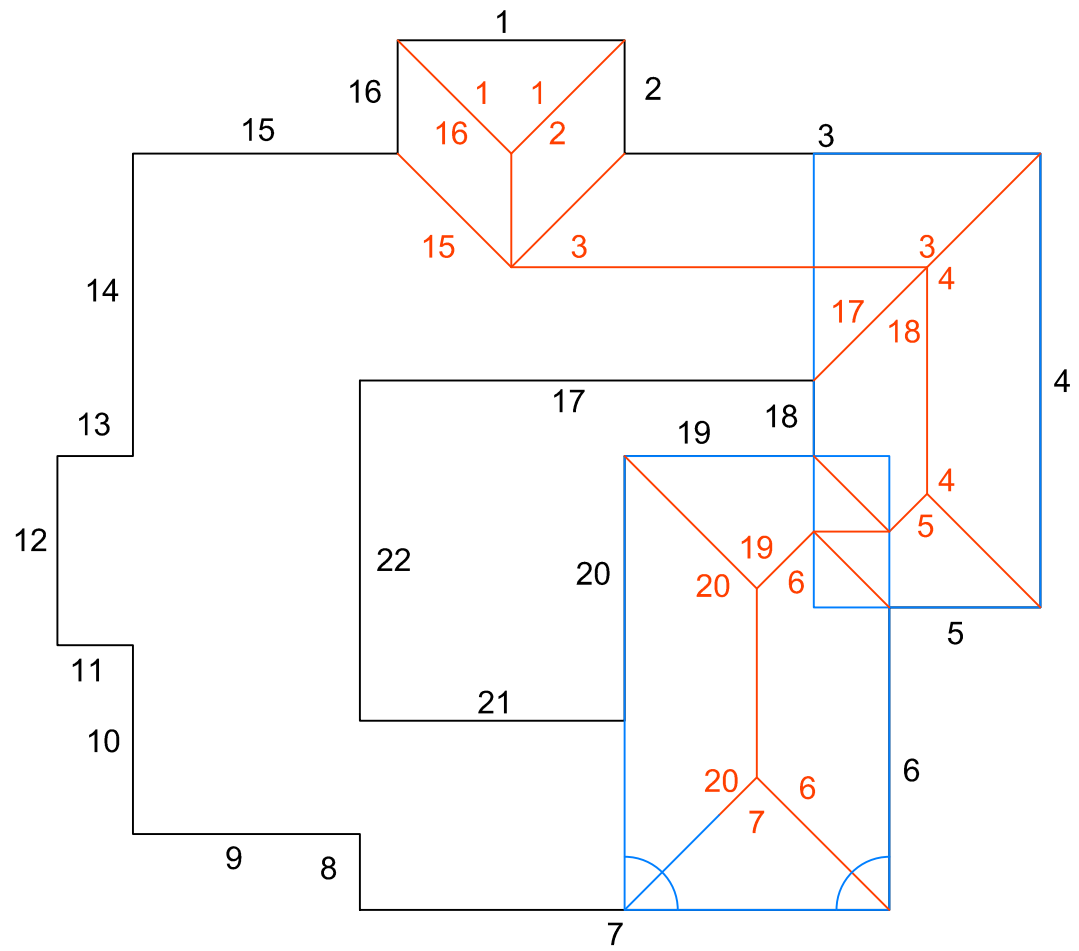


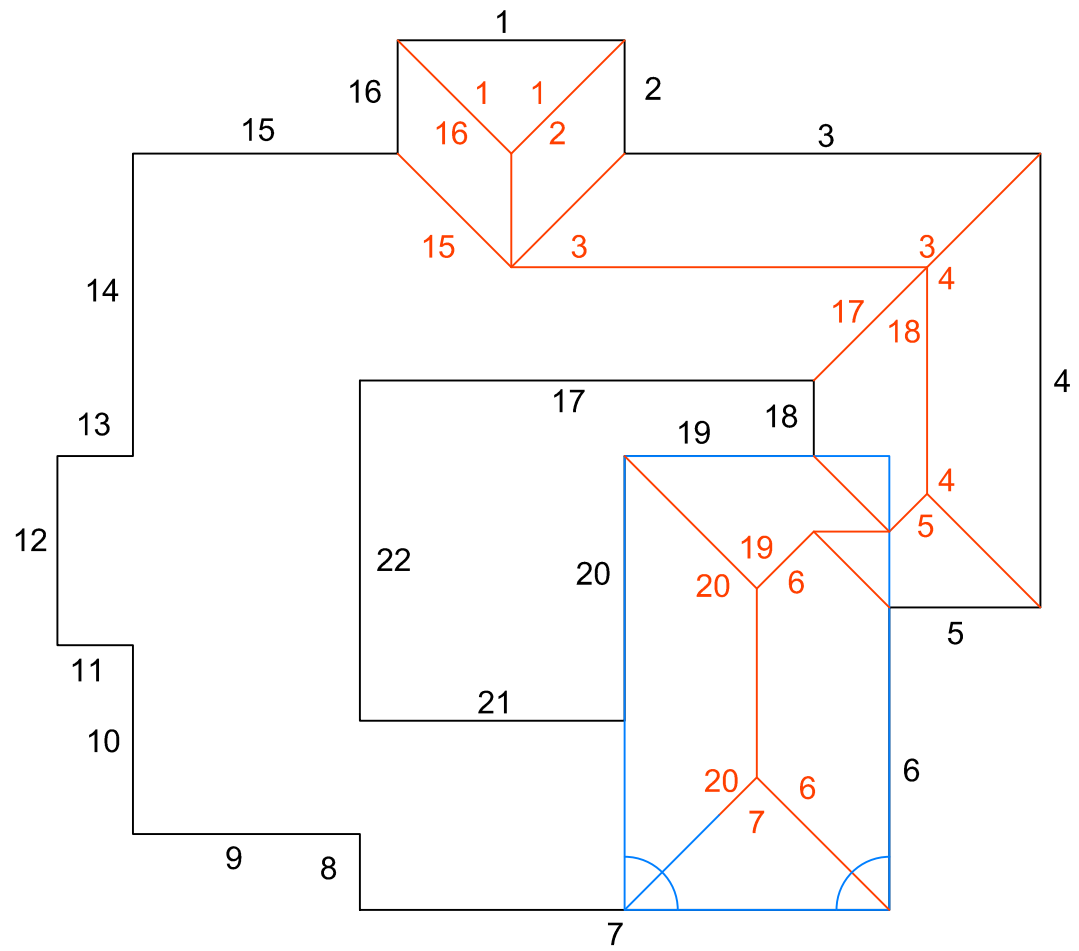


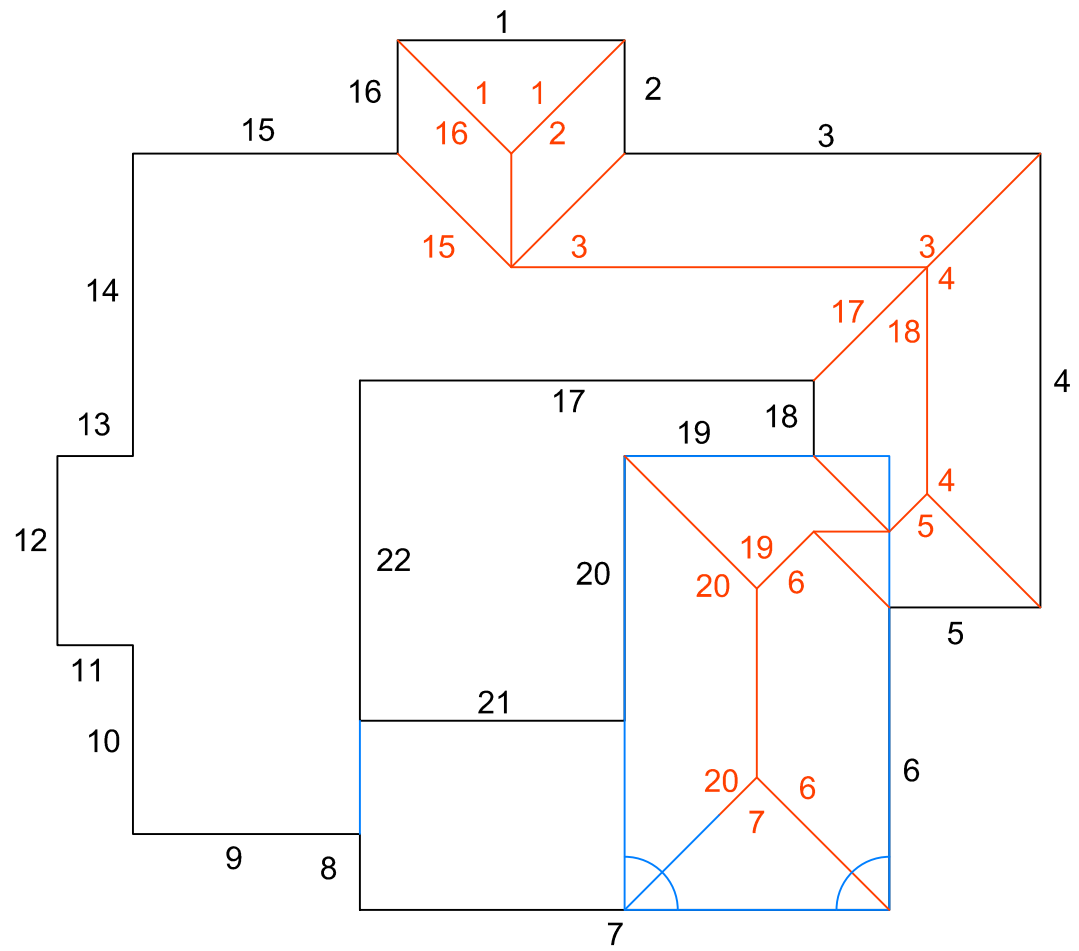


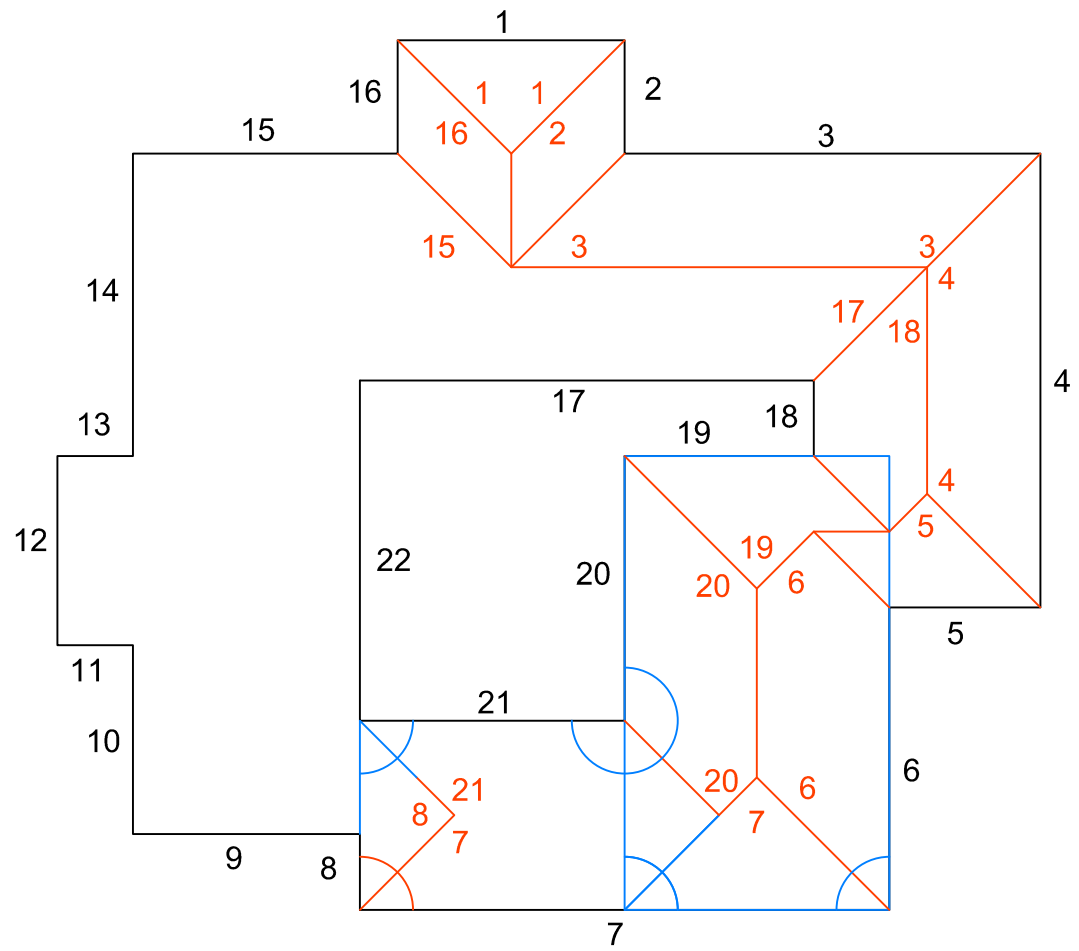


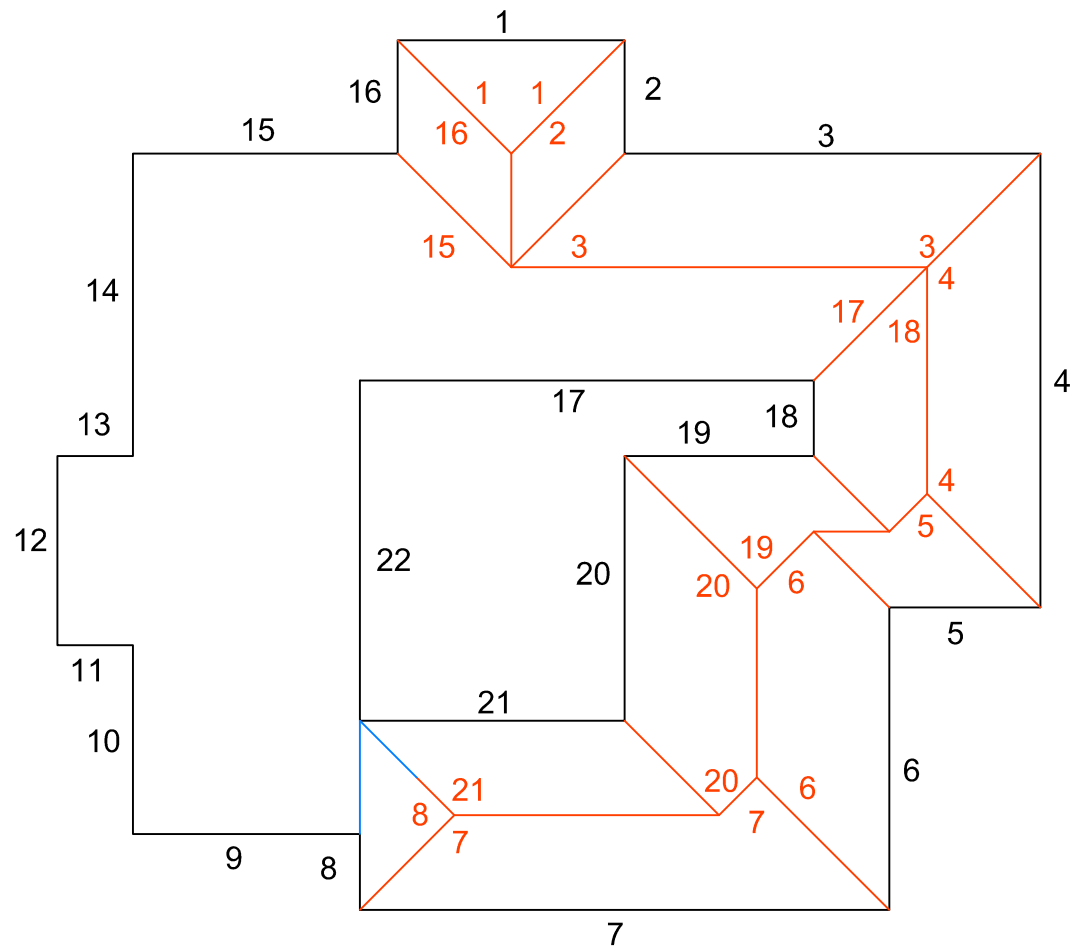


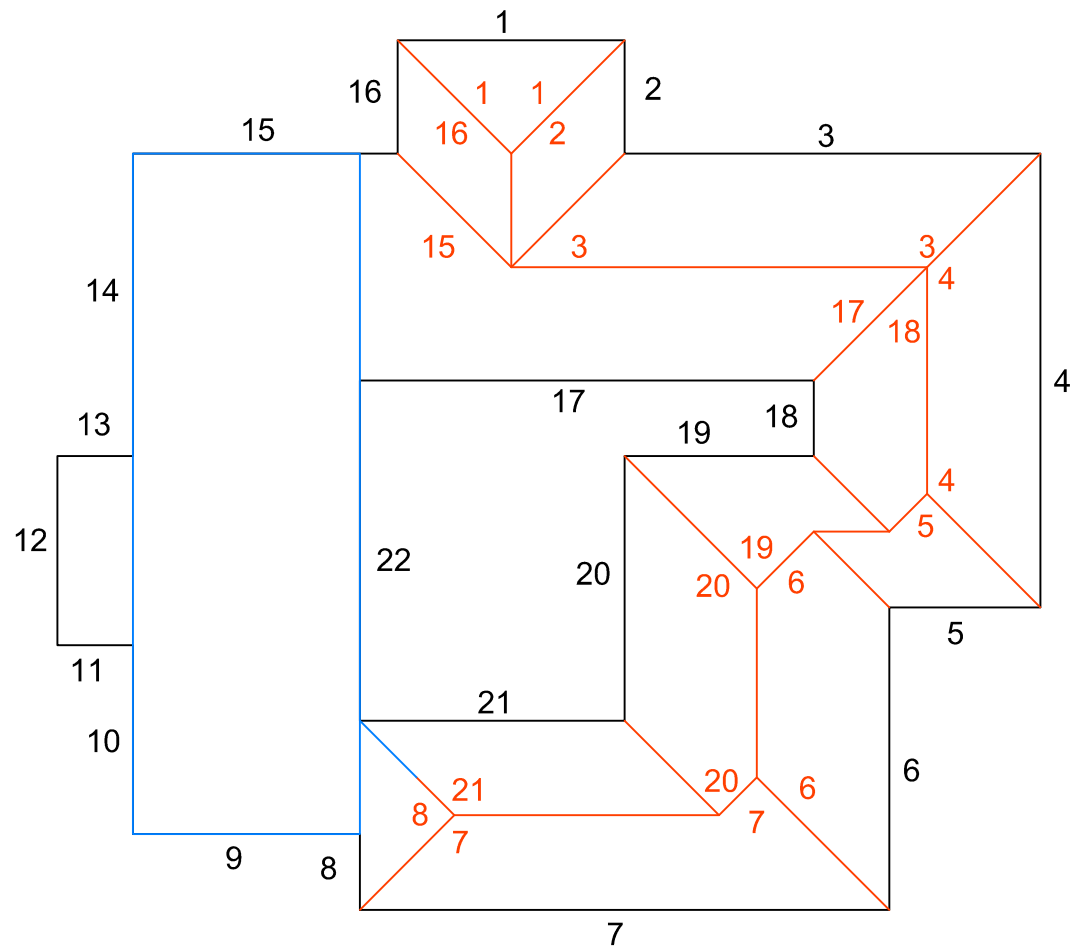


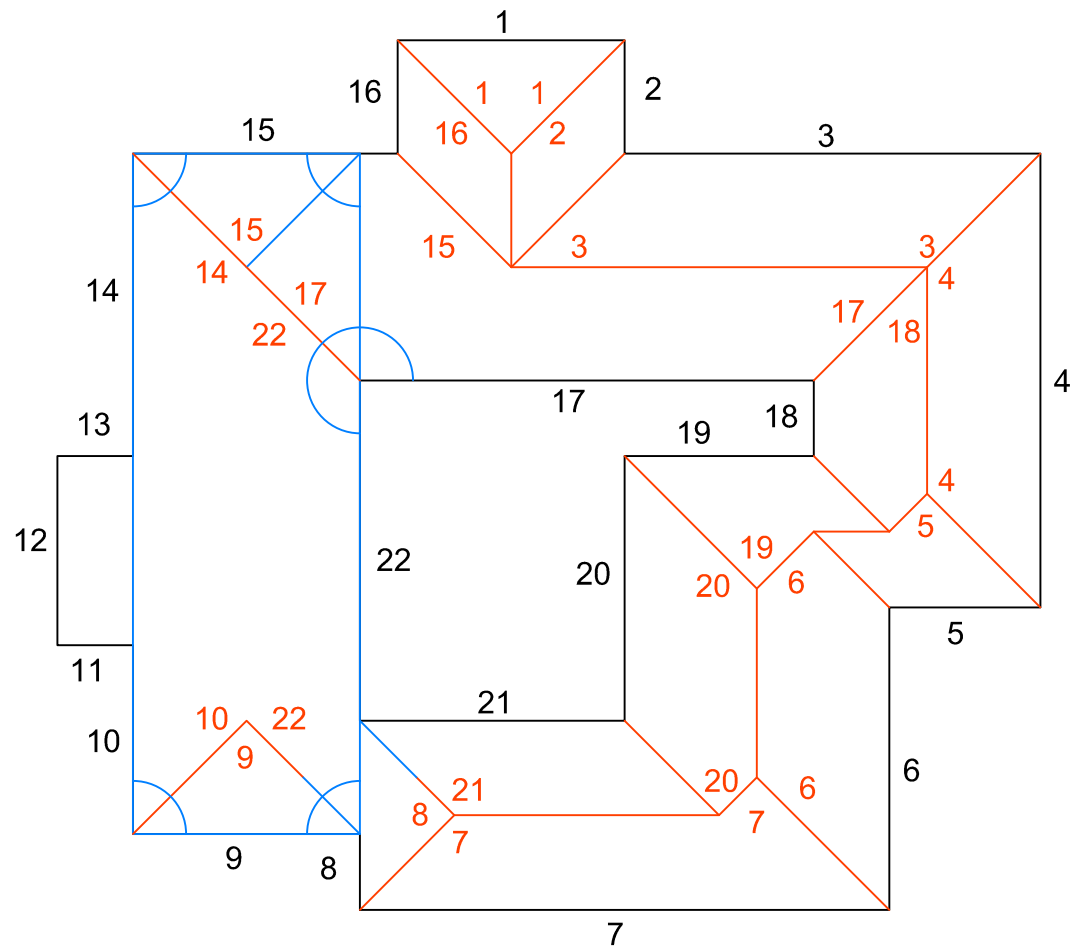




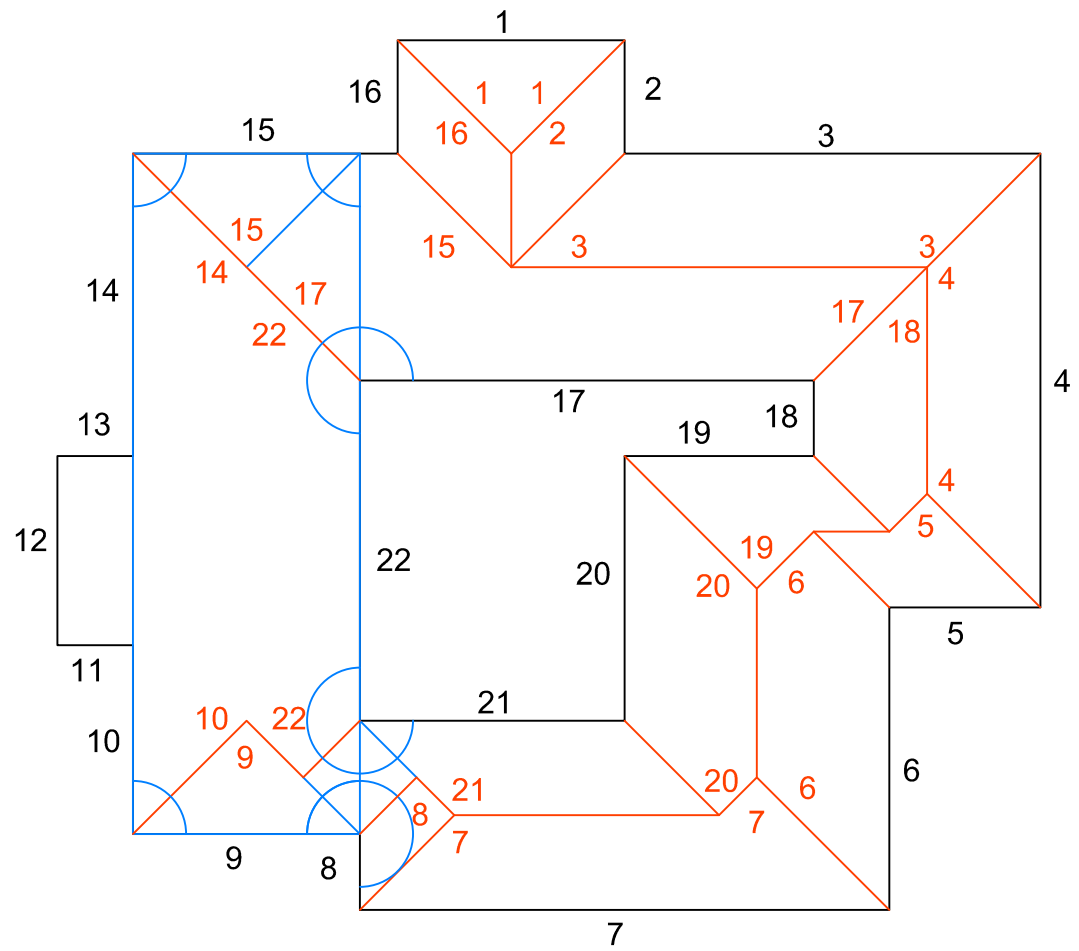


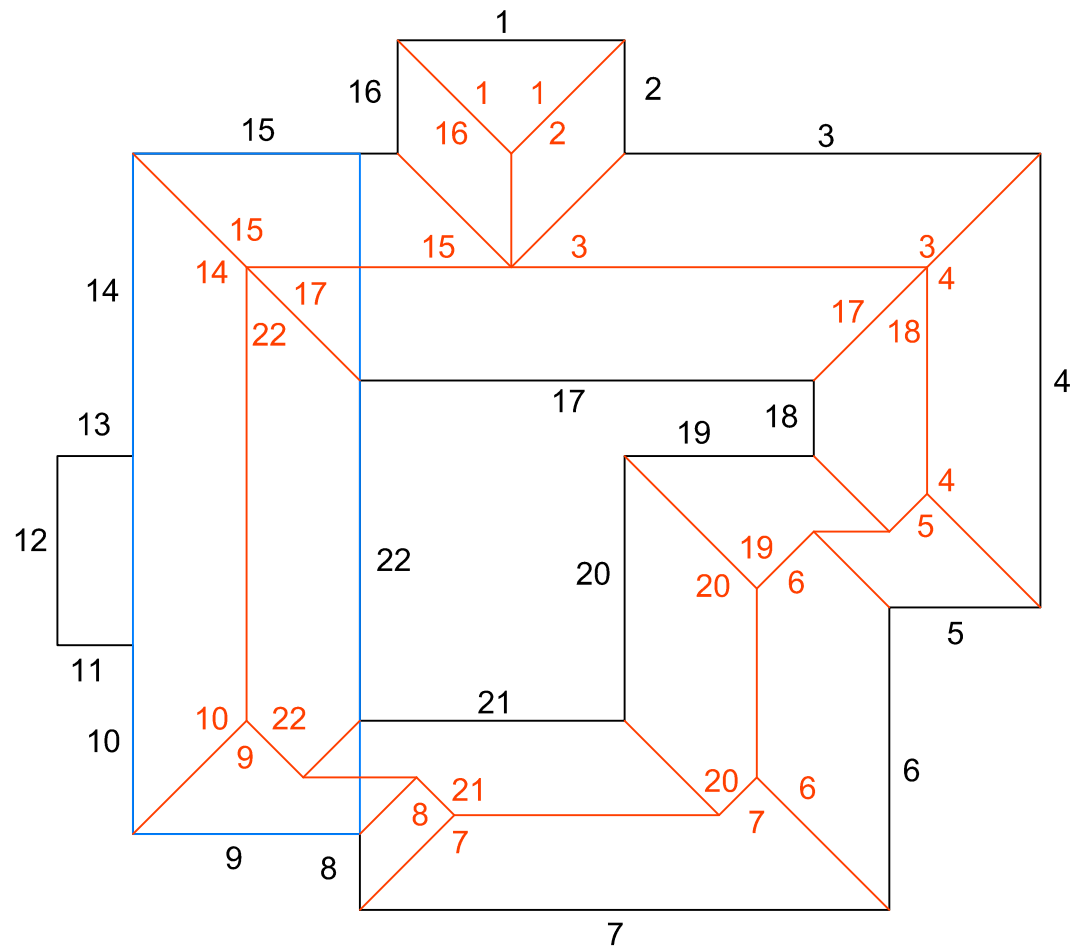


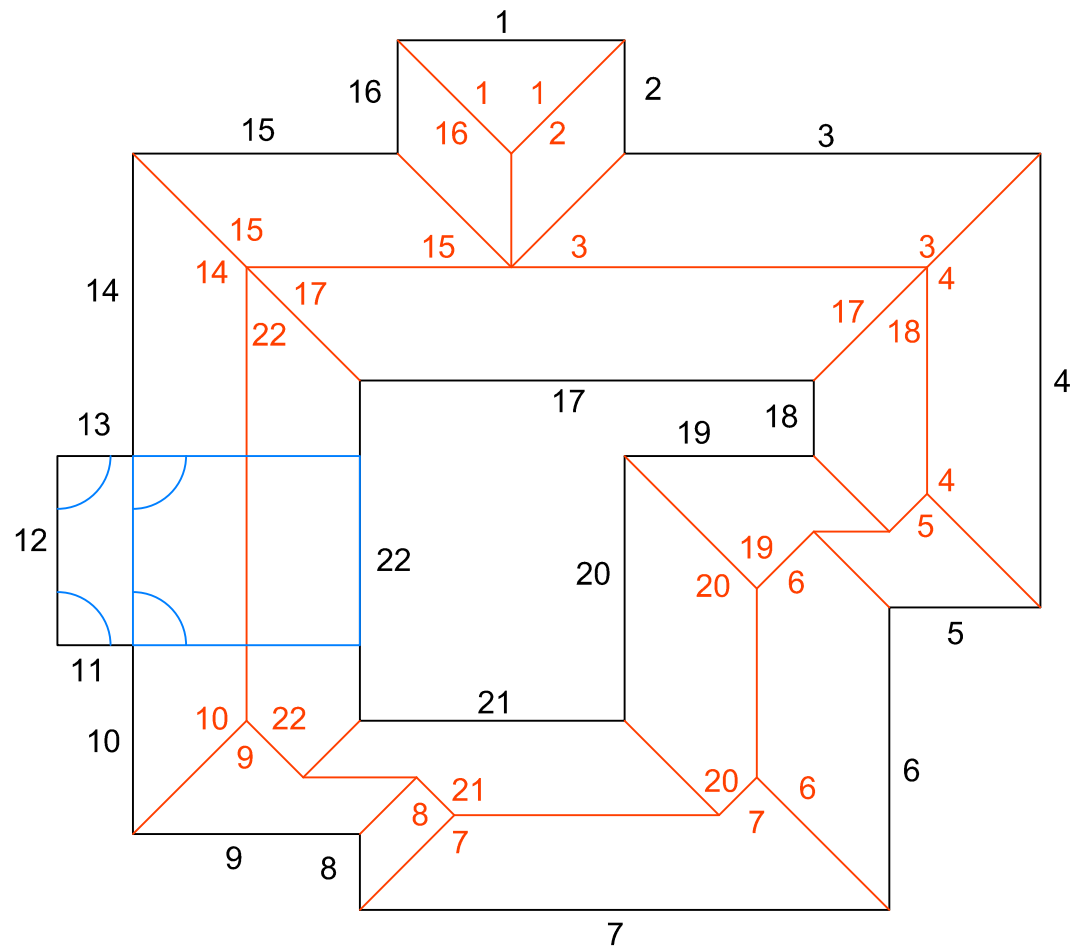


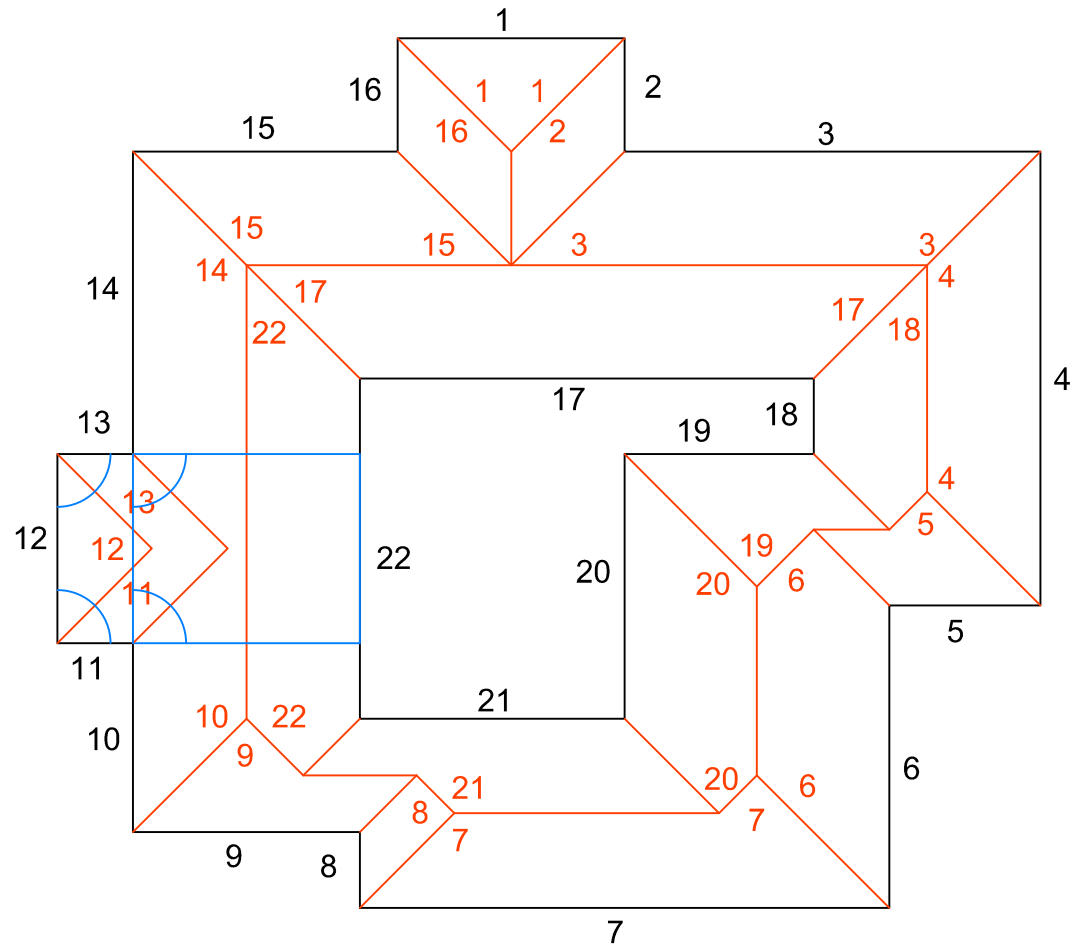


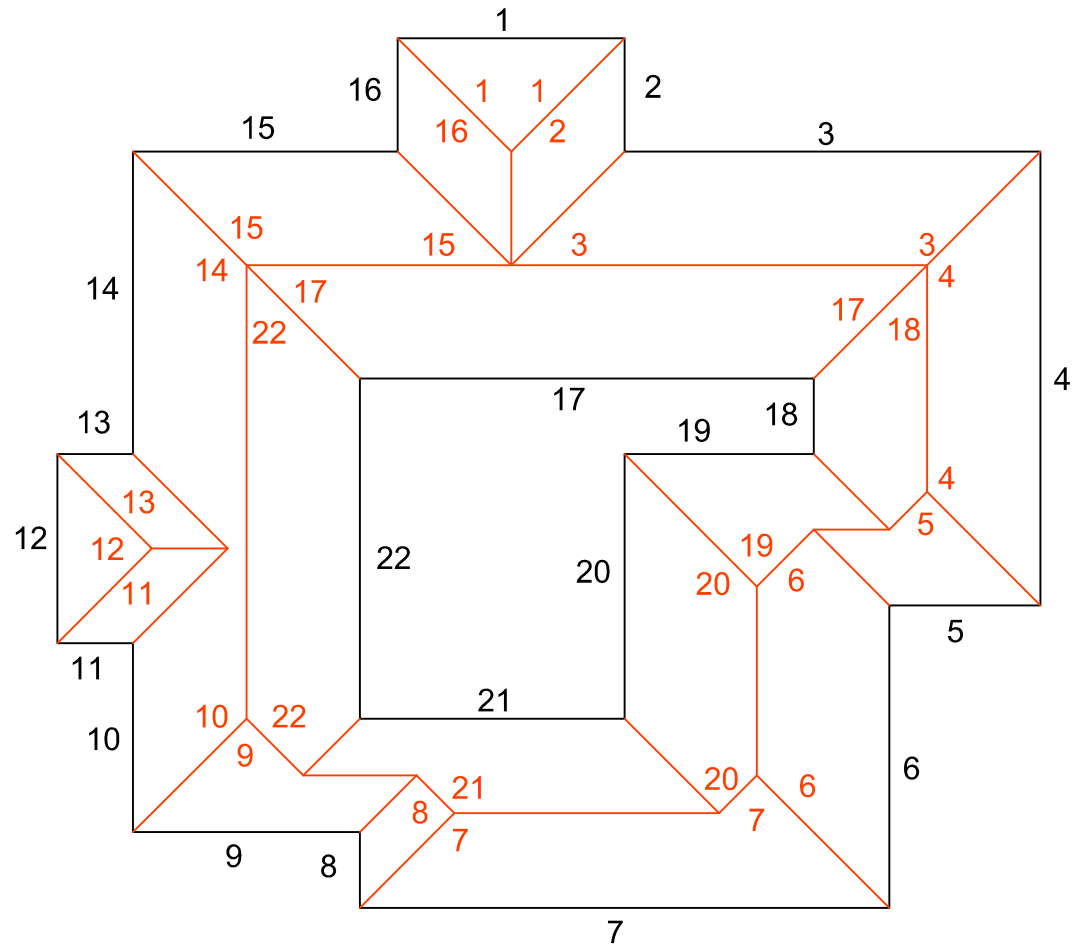


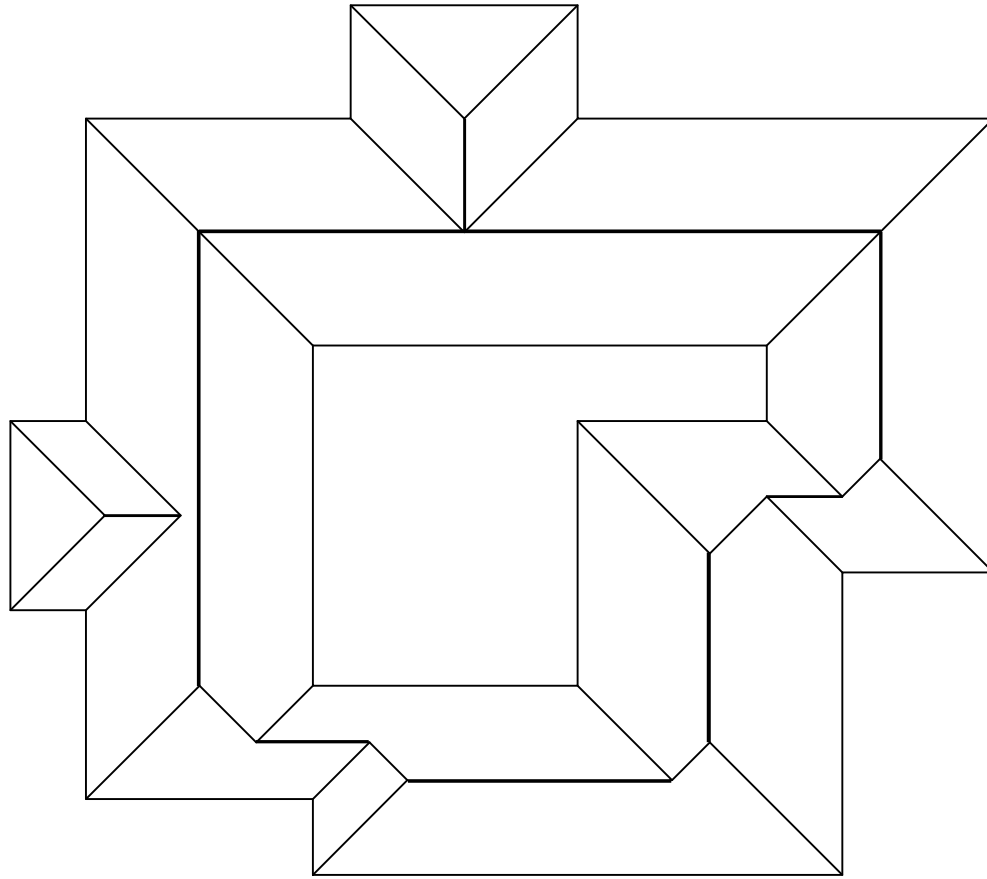




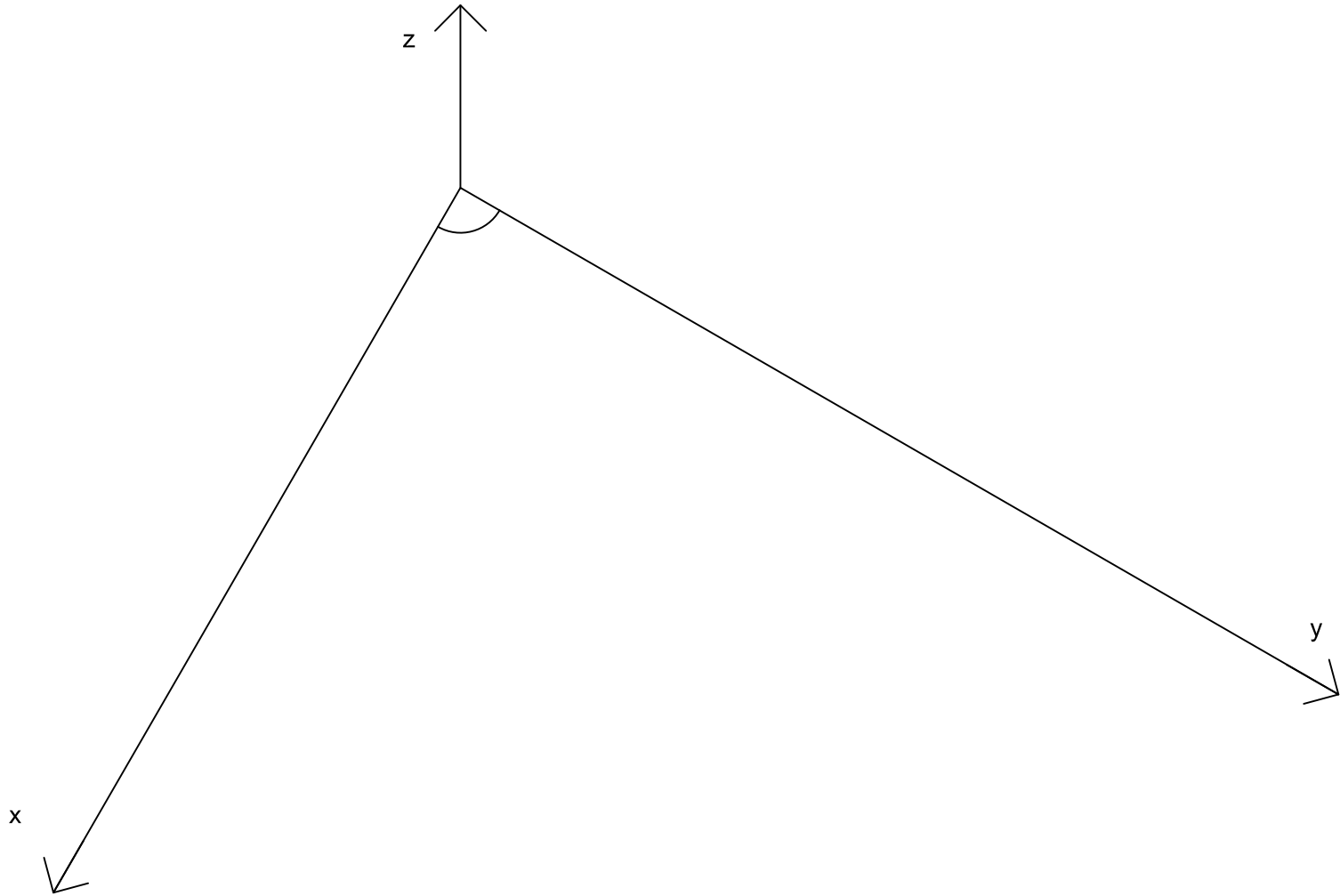




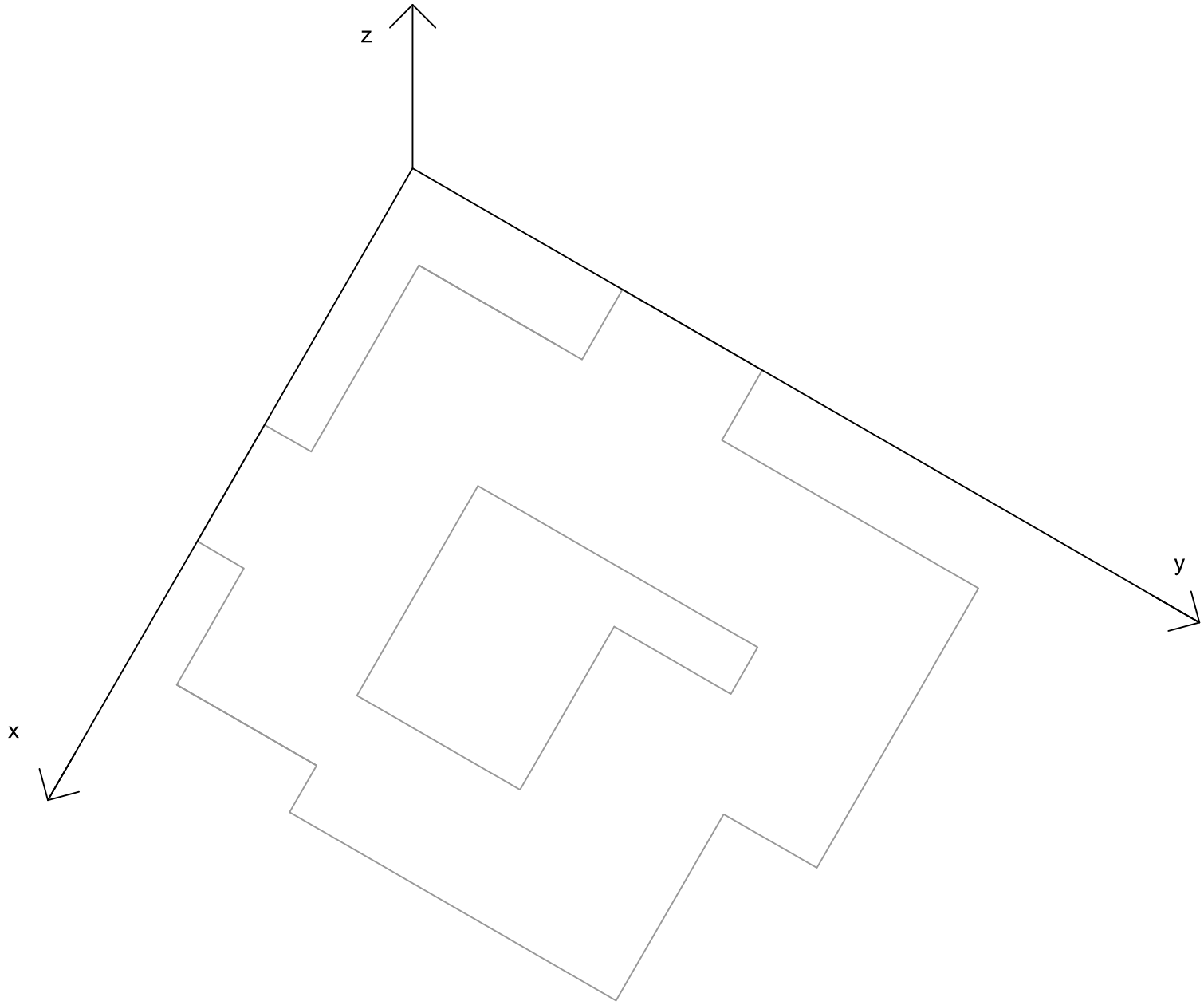


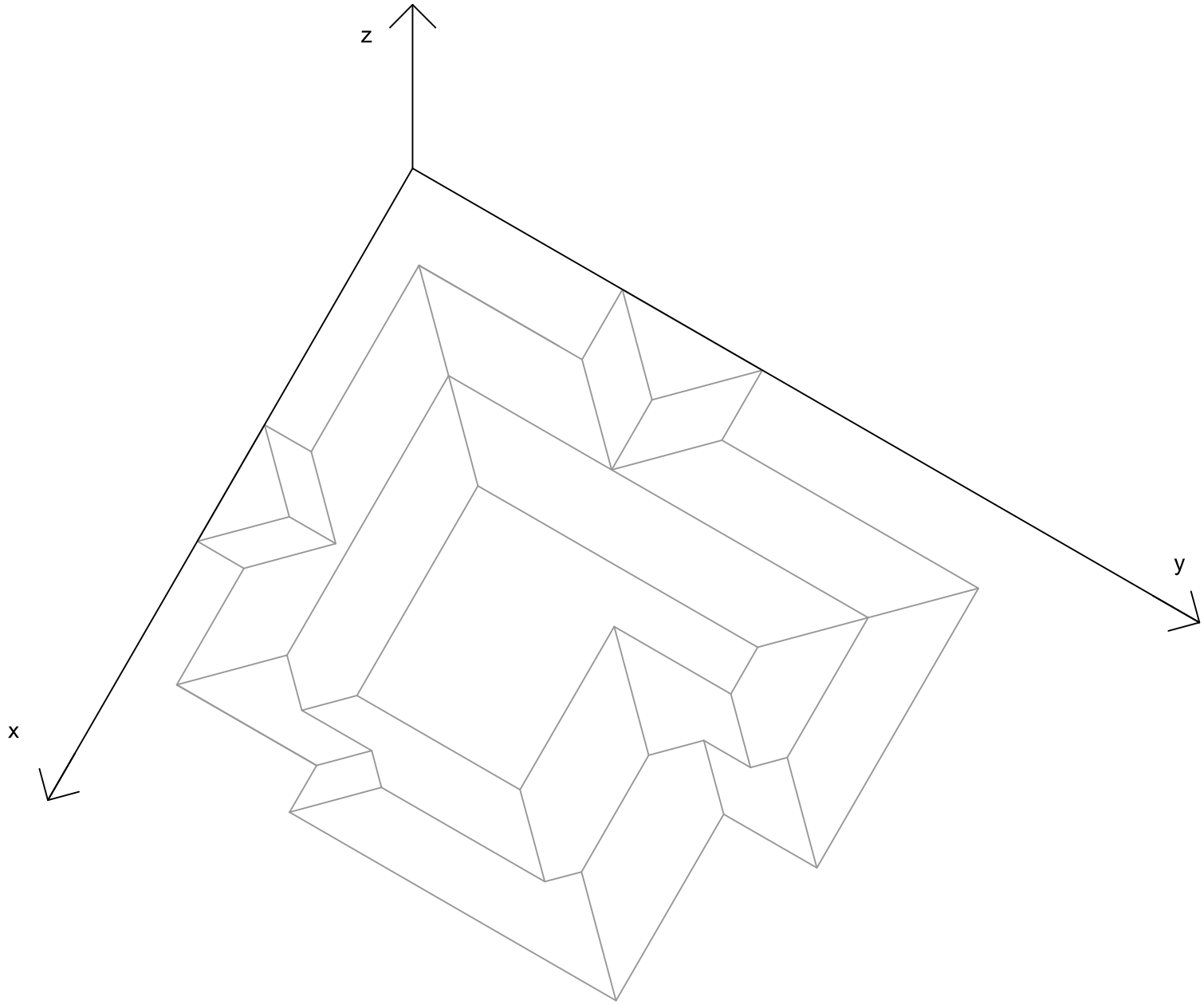


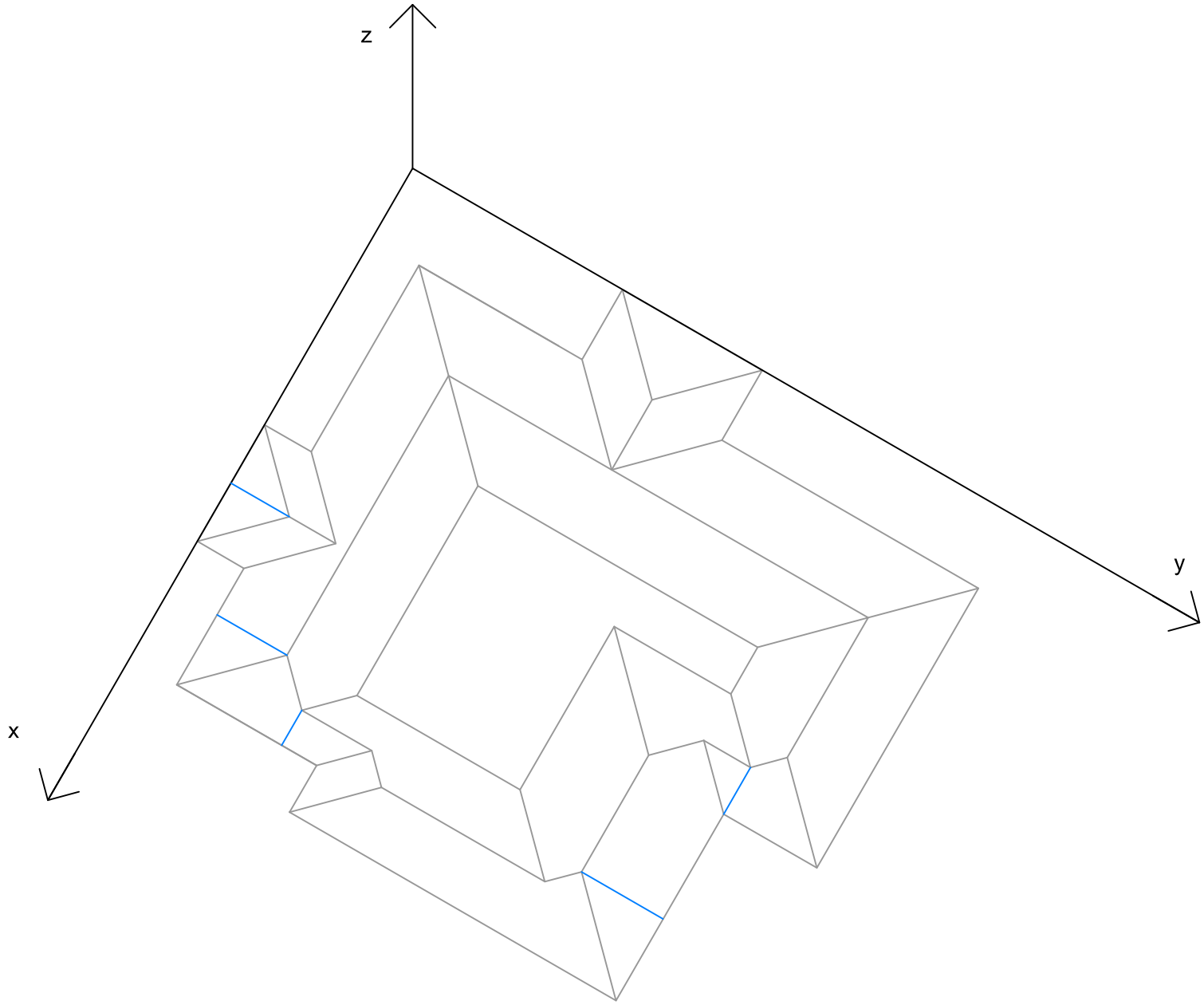
# Vojenská perspektiva

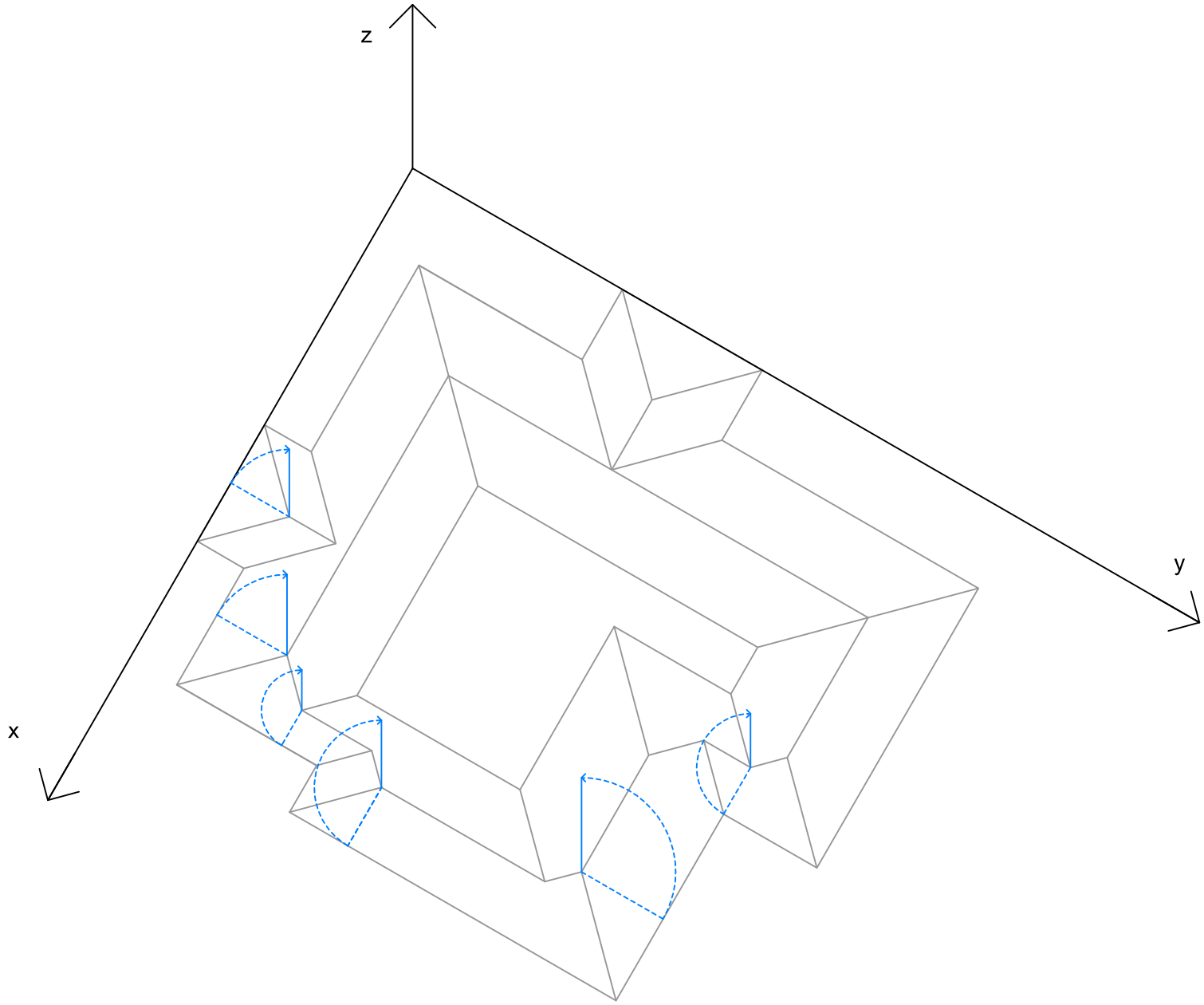


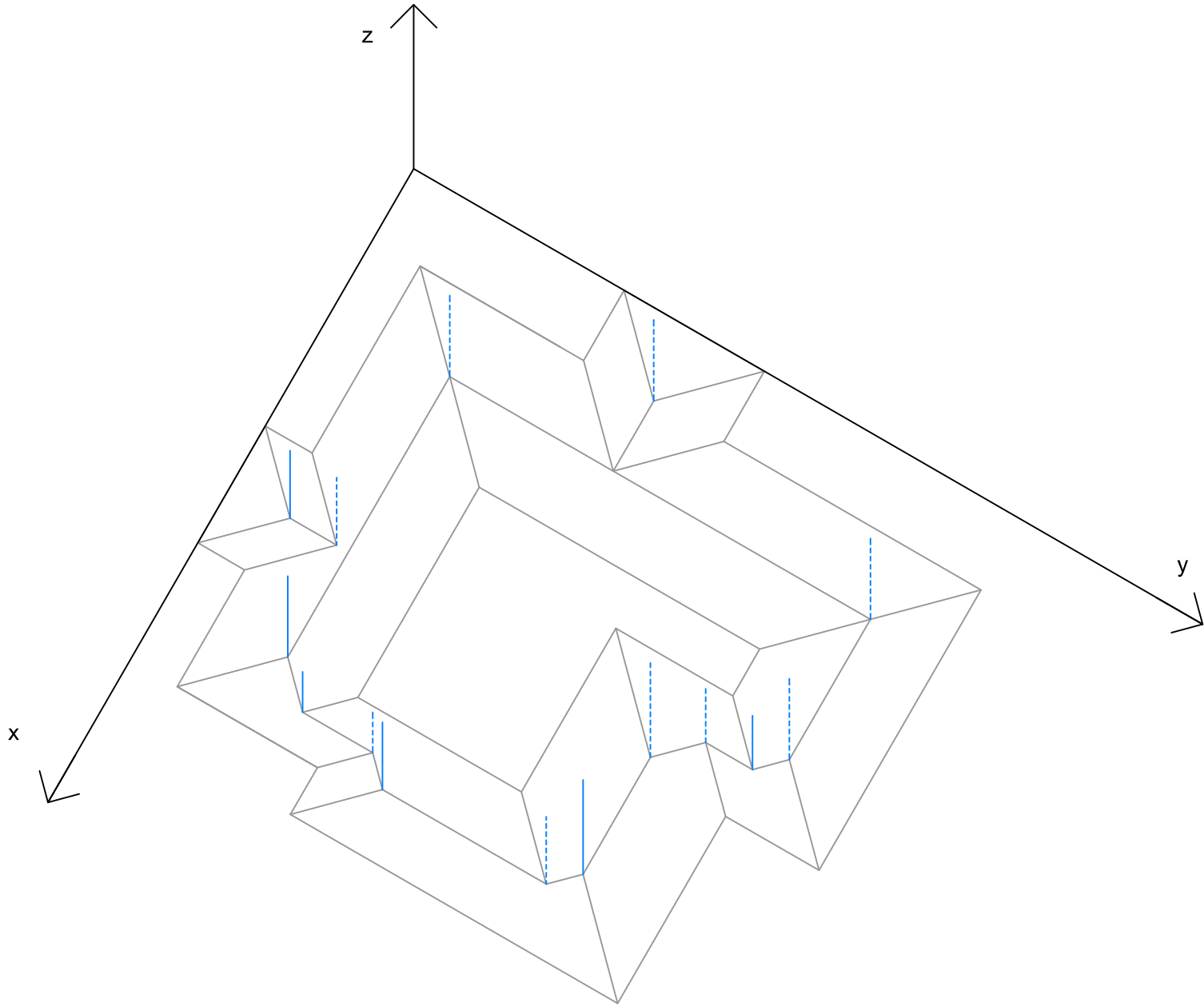


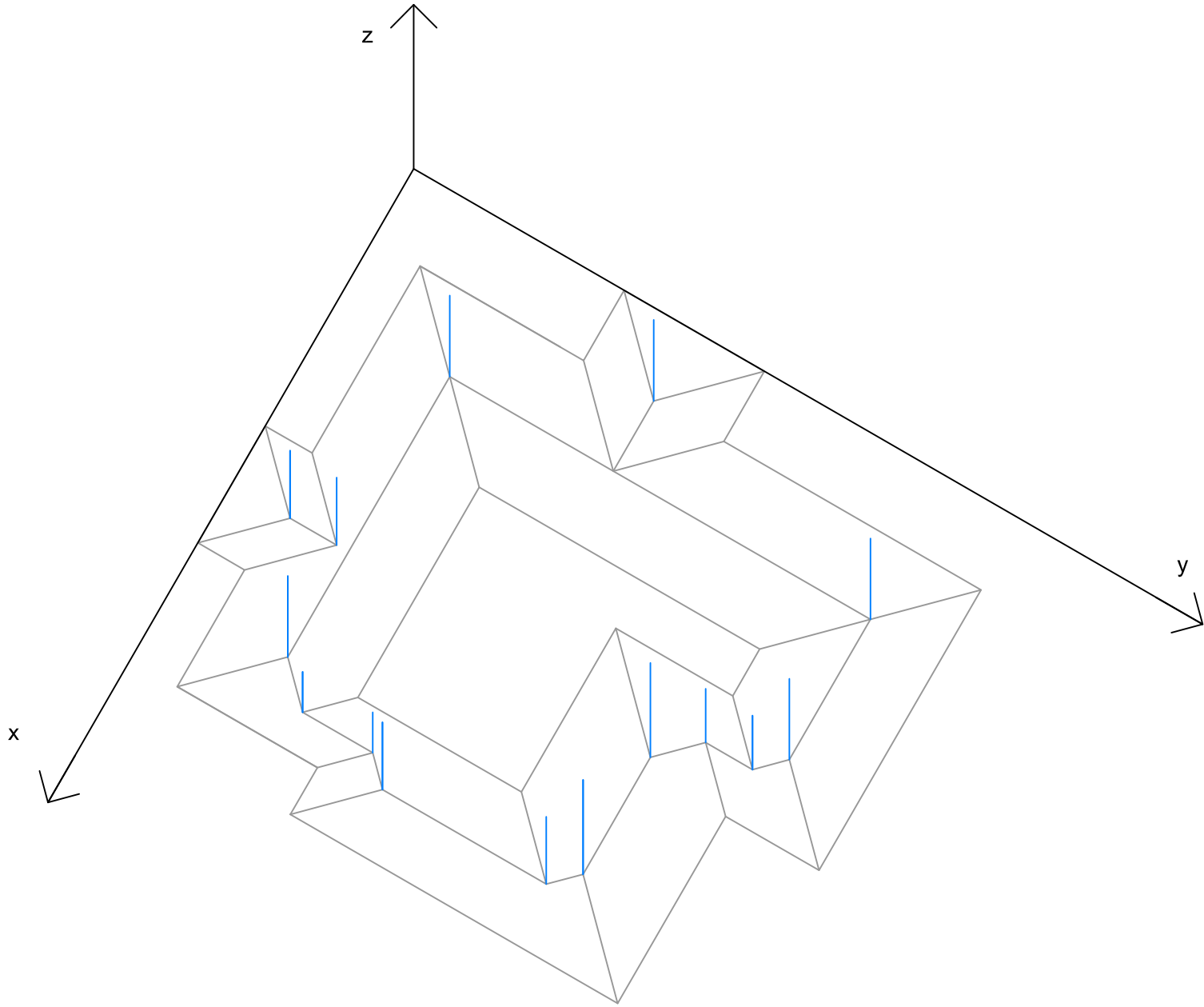


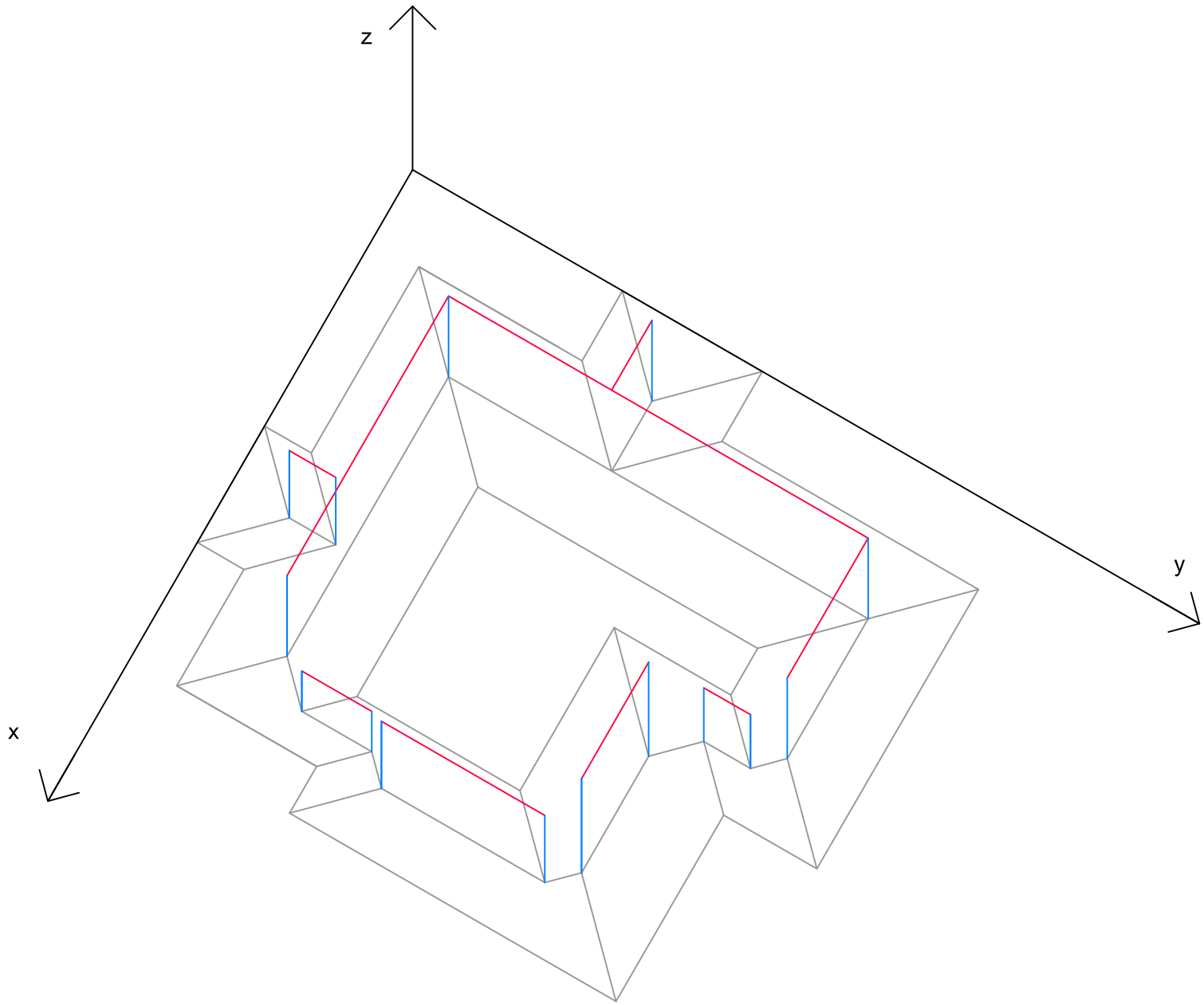


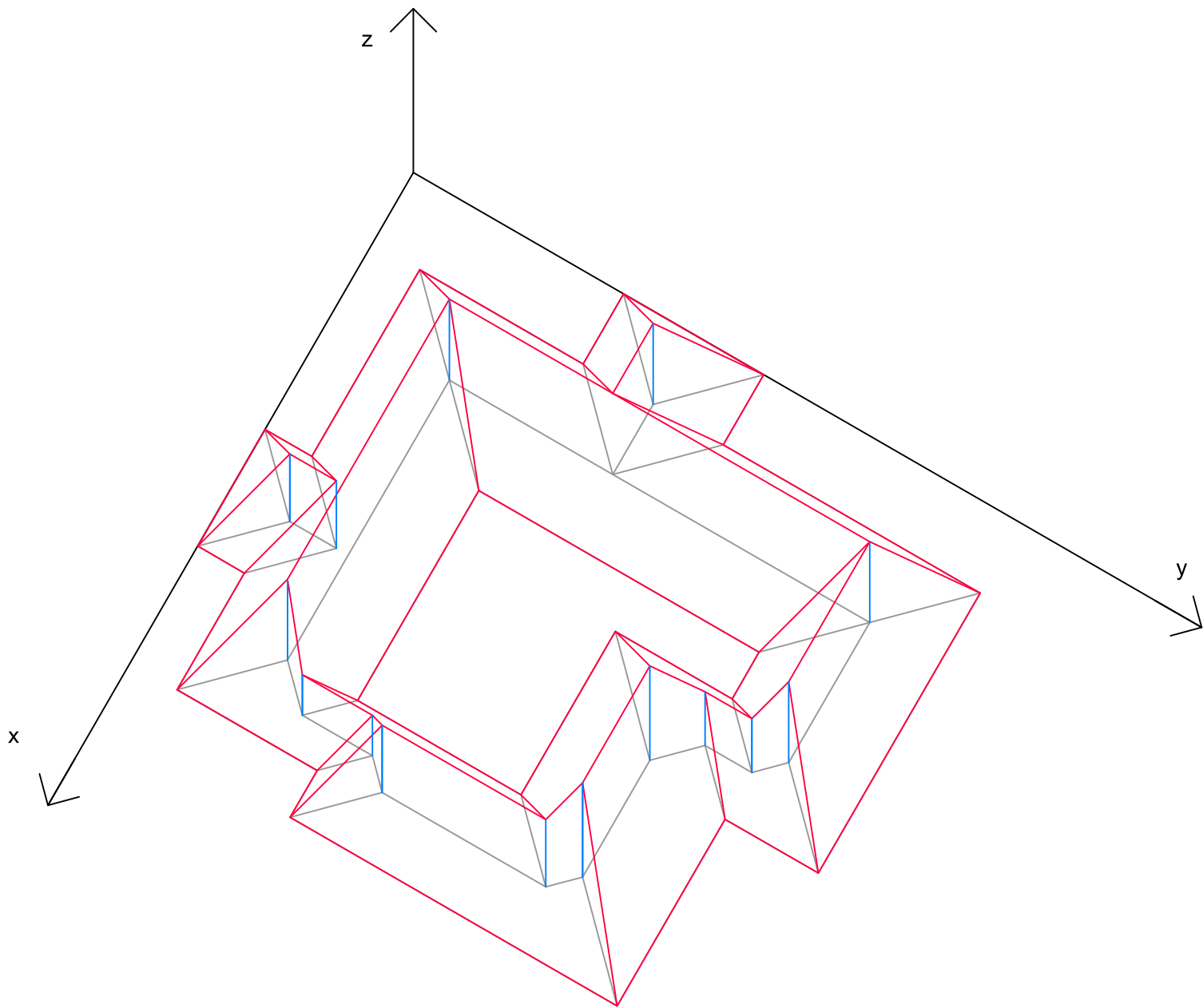




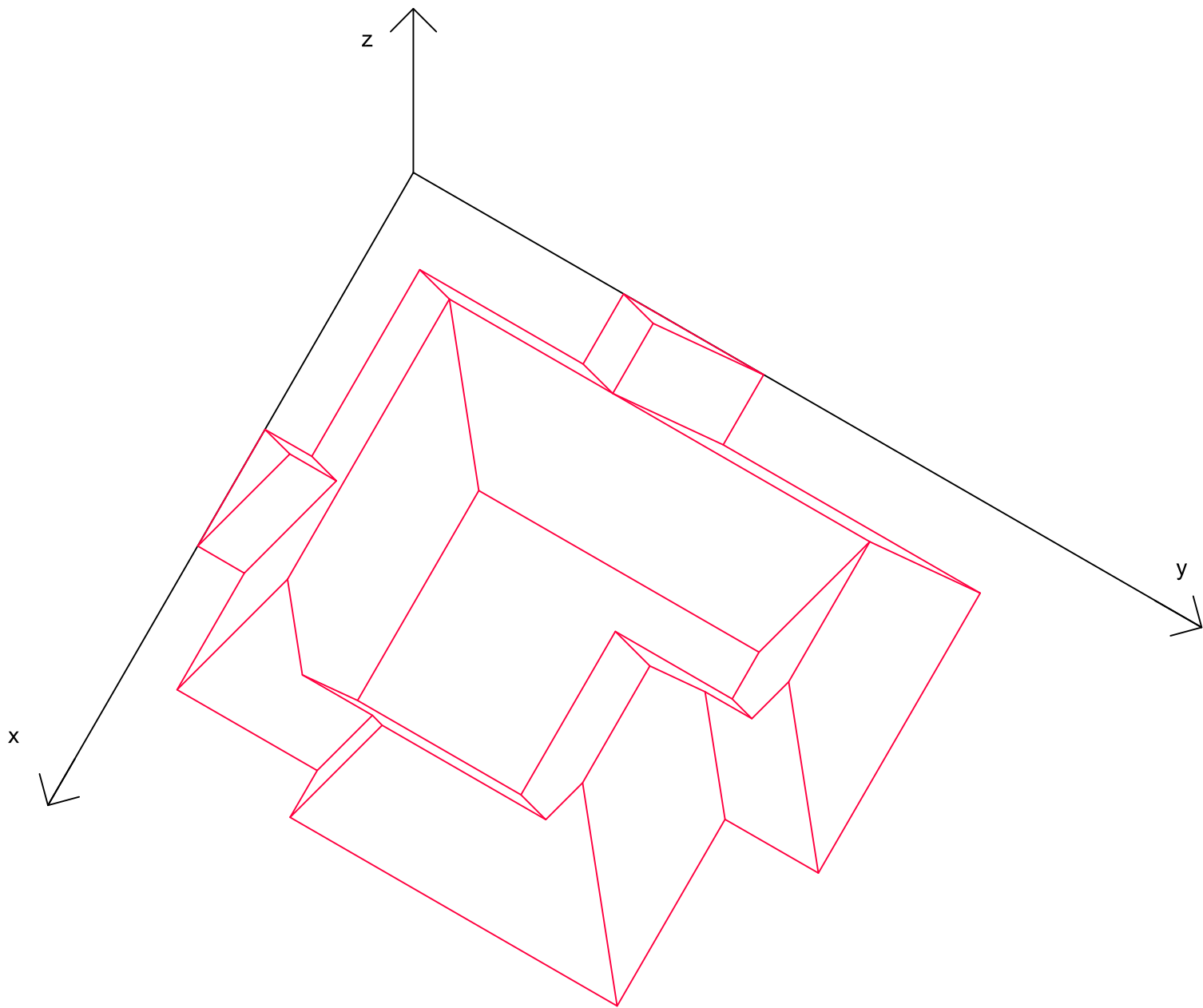






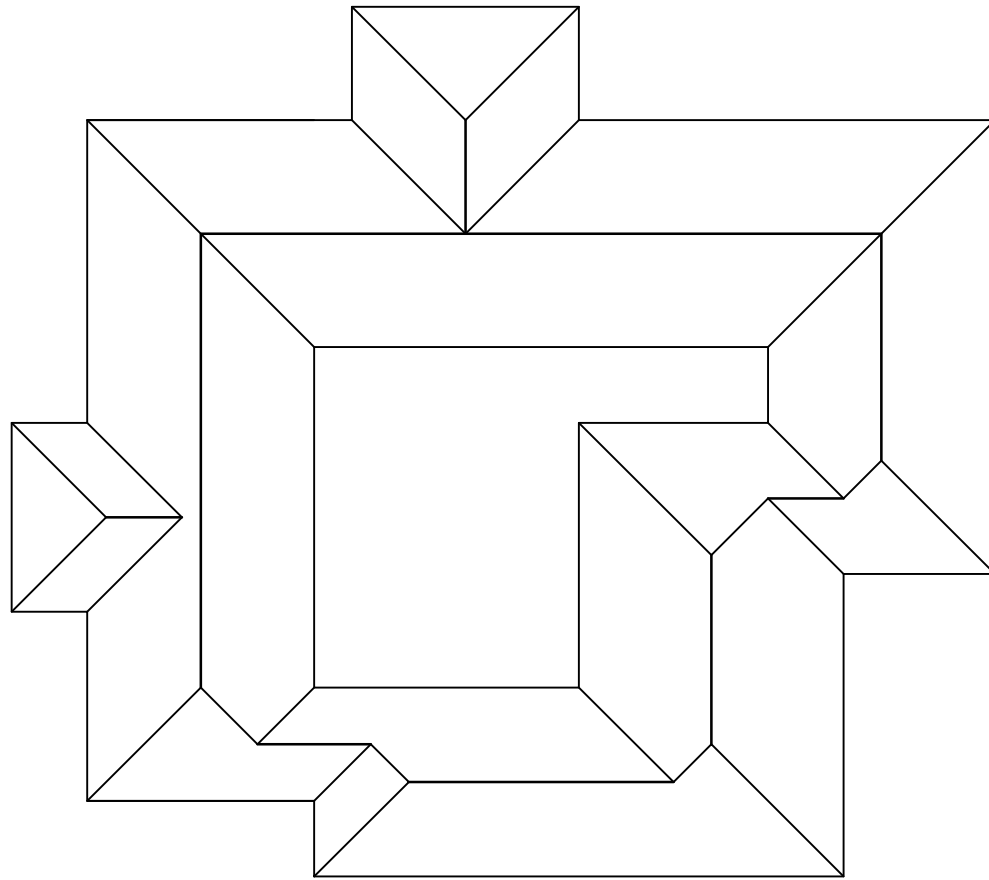


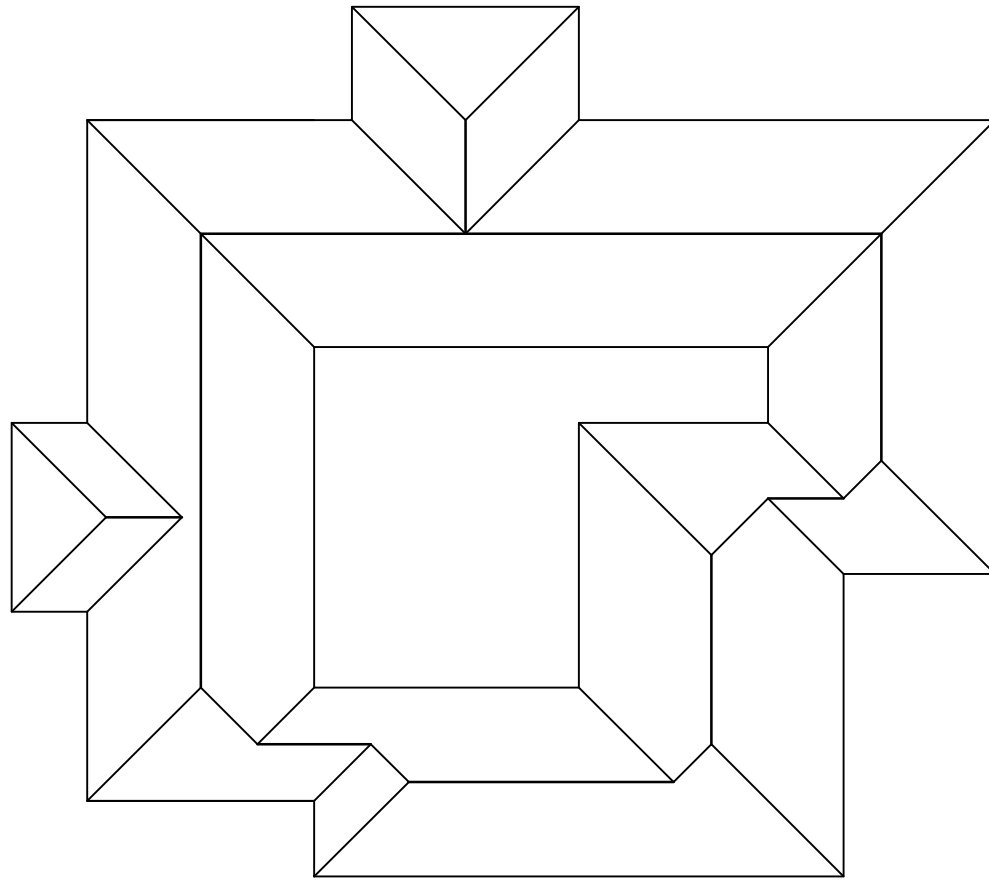


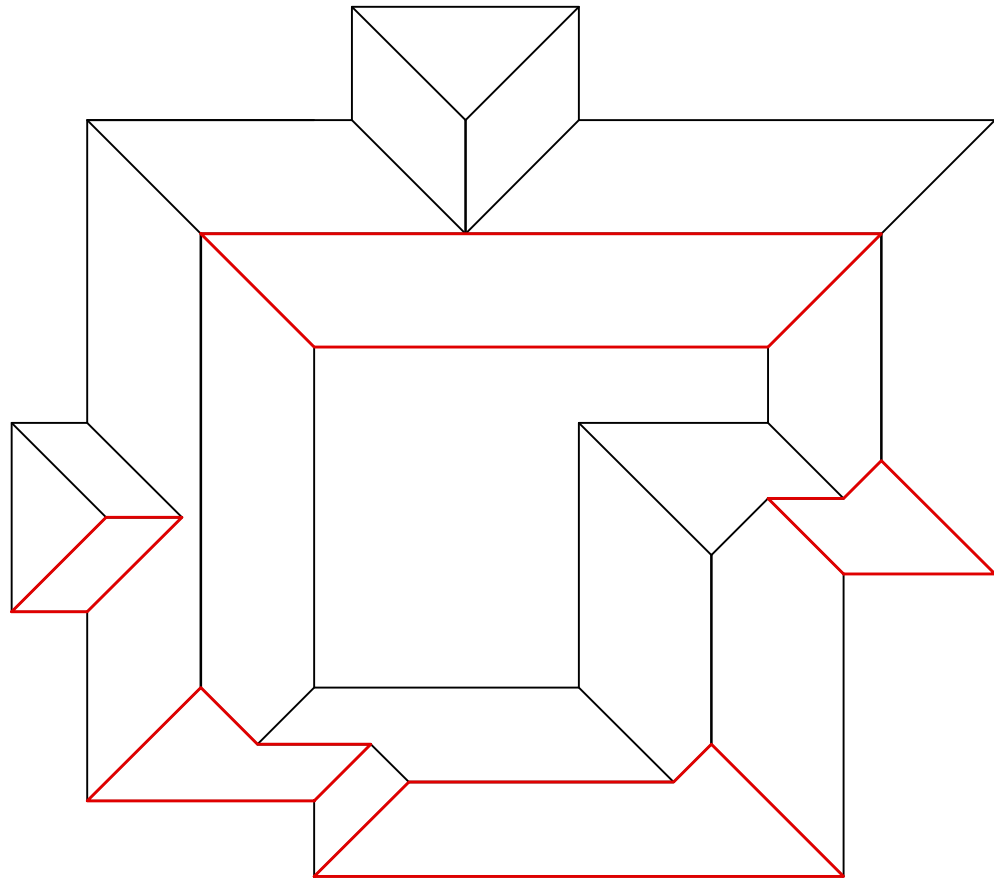


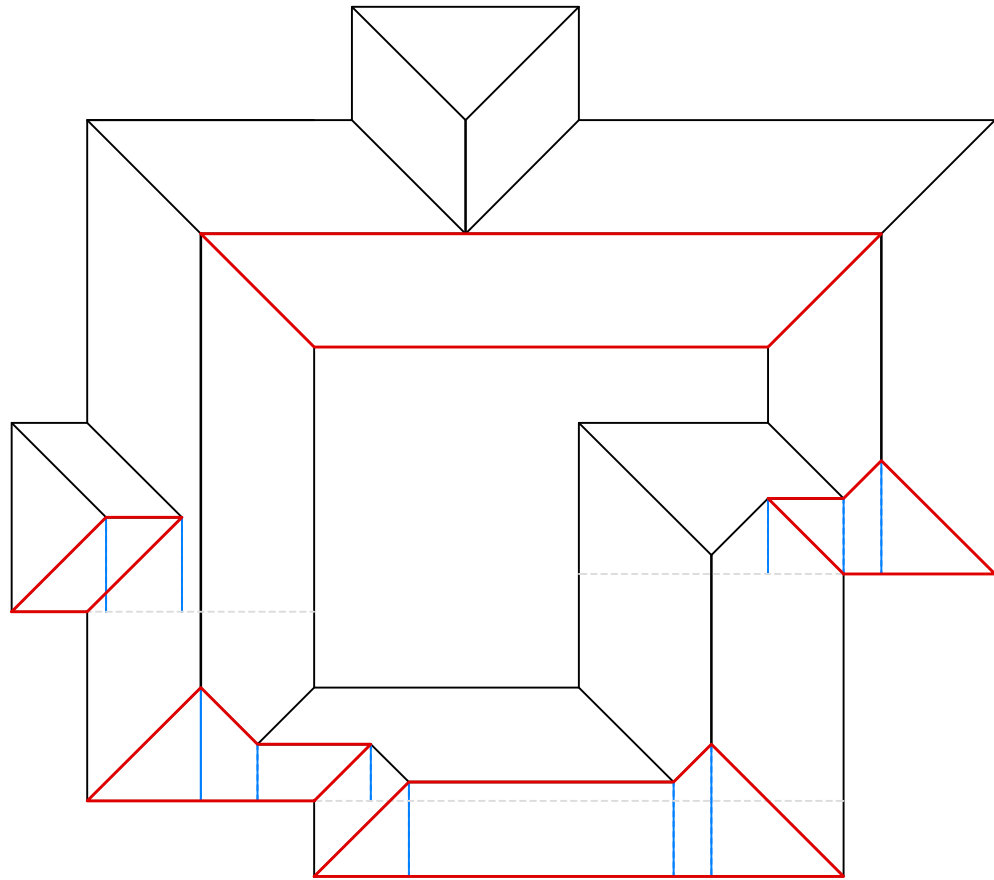
# Pohledy

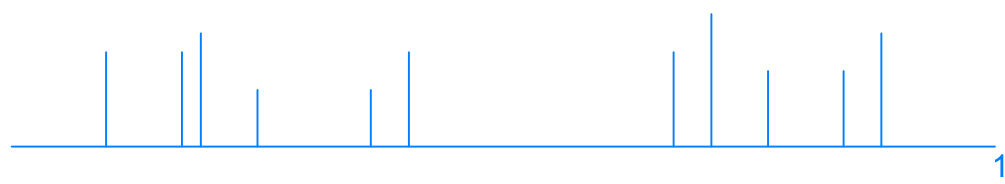
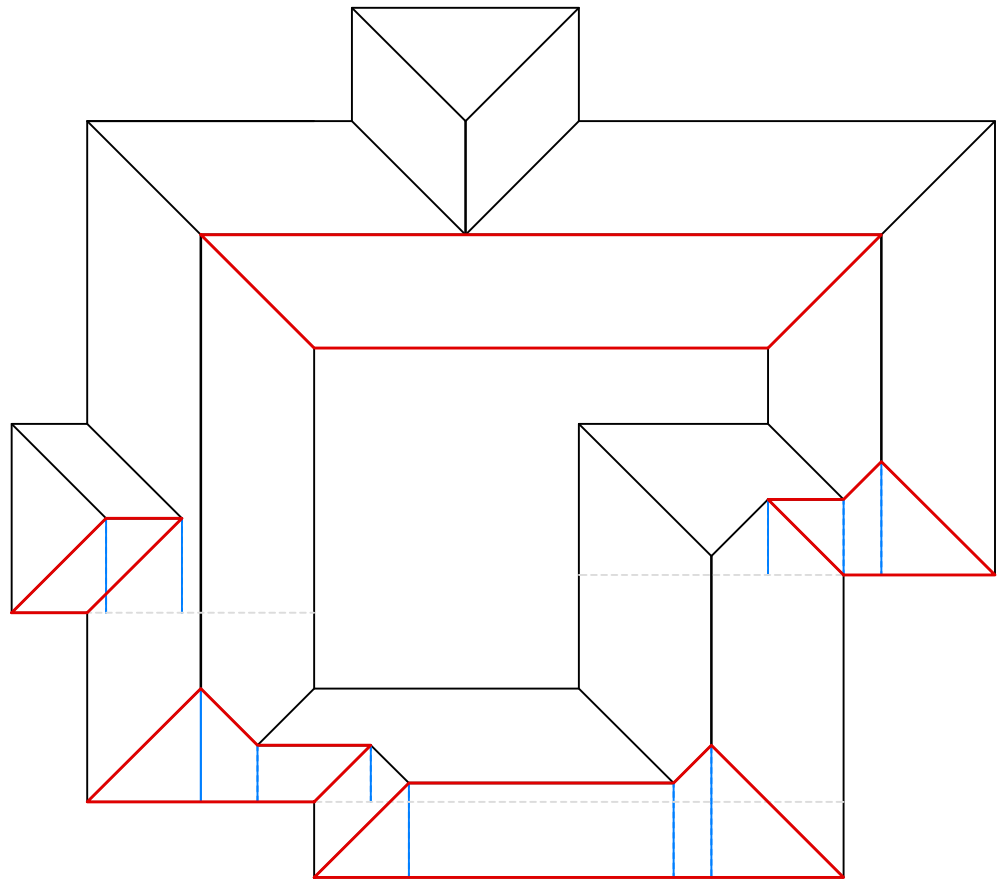
Ur ujeme pouze viditelné hrany

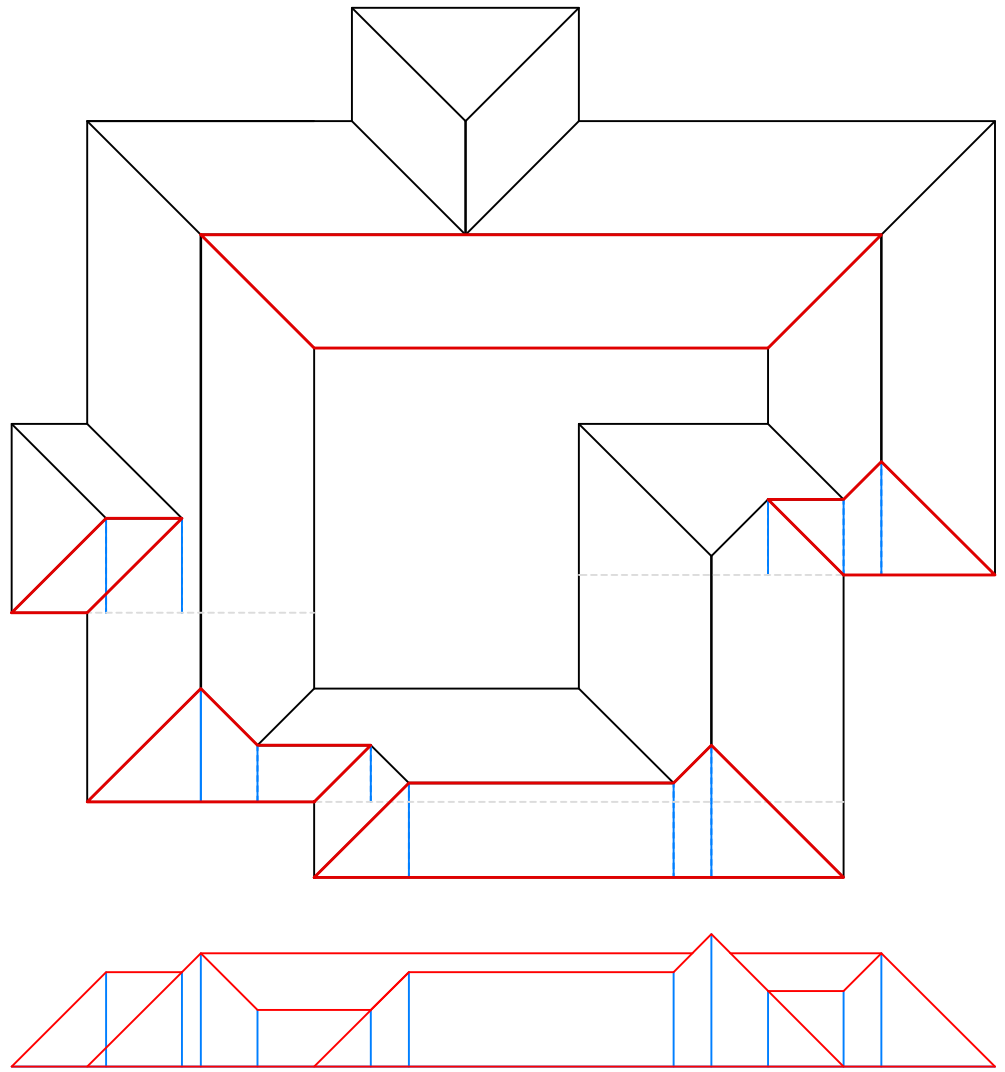




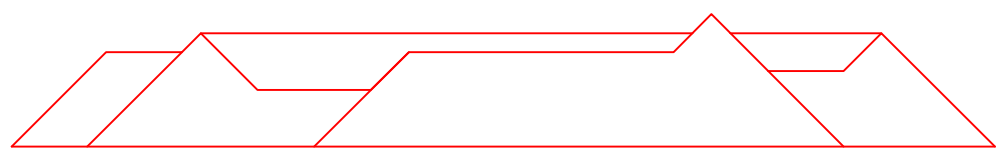
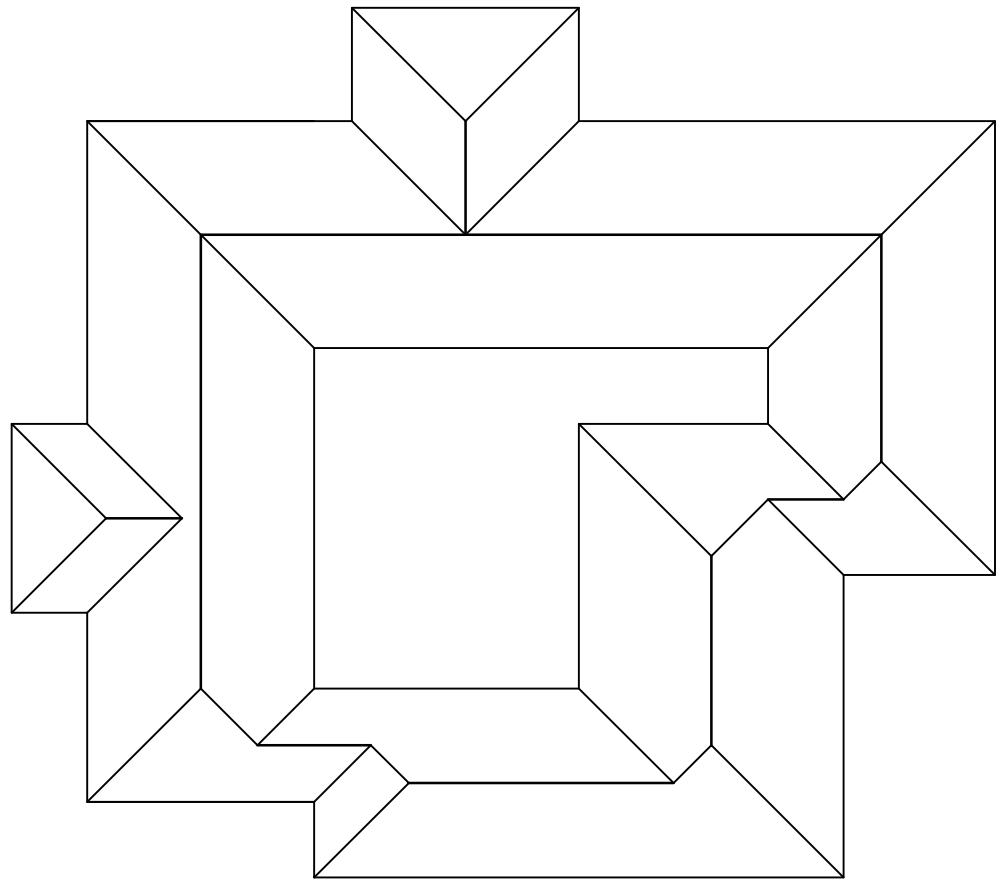


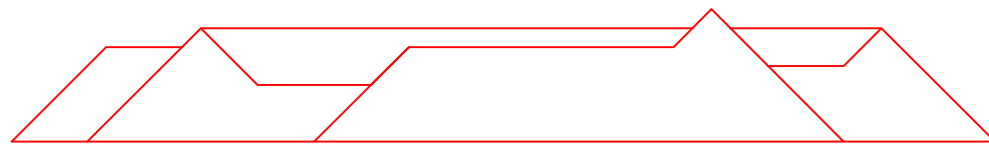
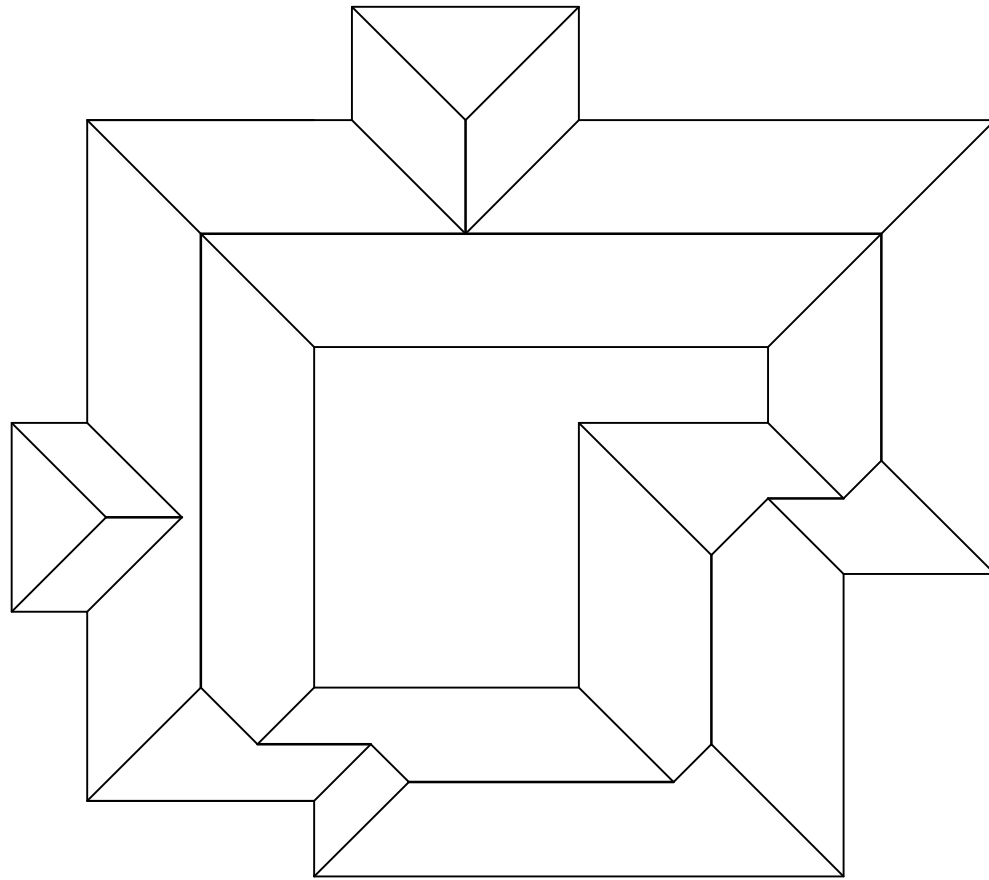


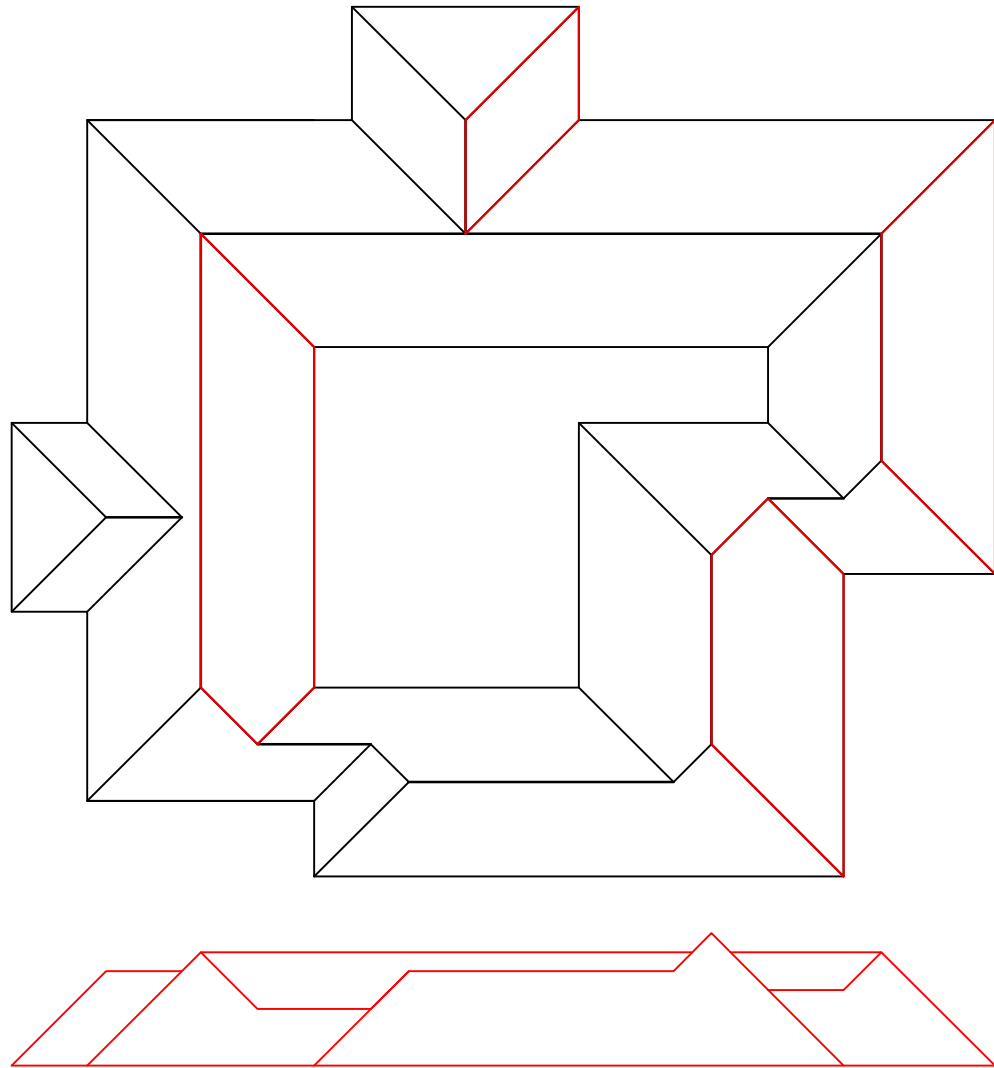


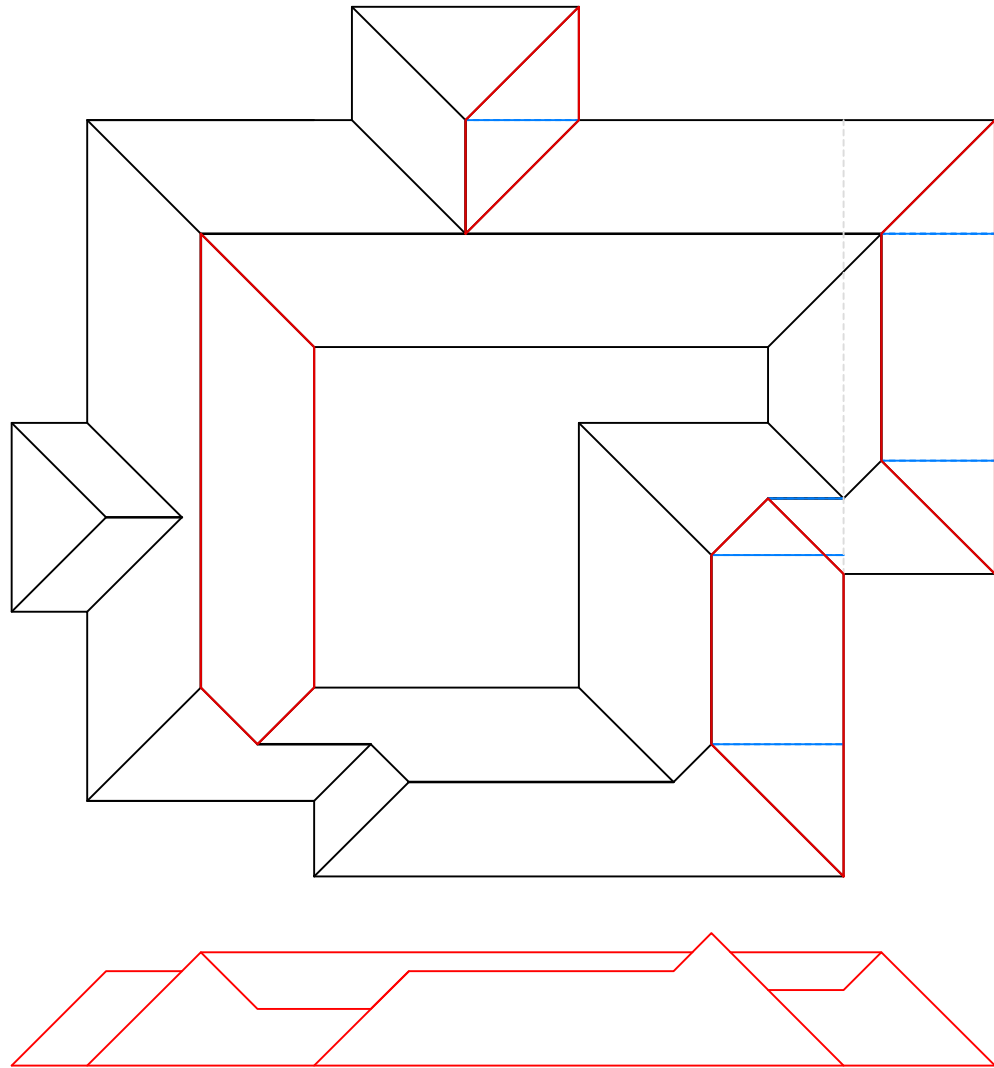


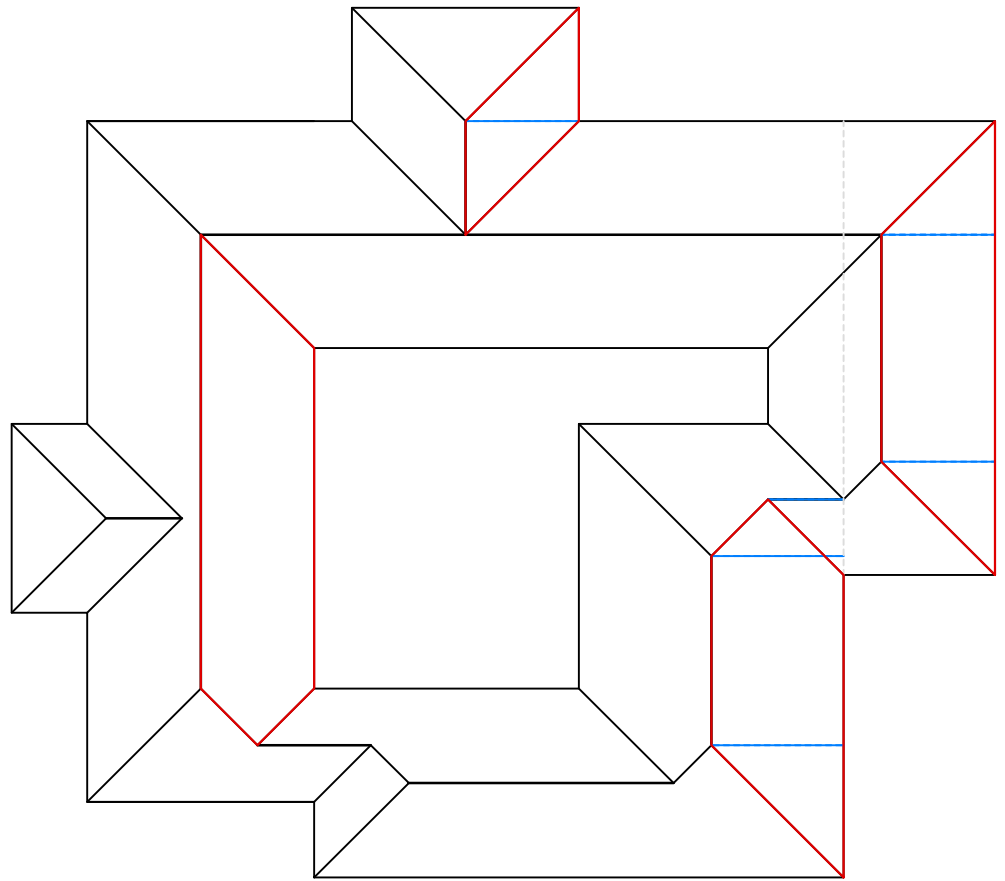




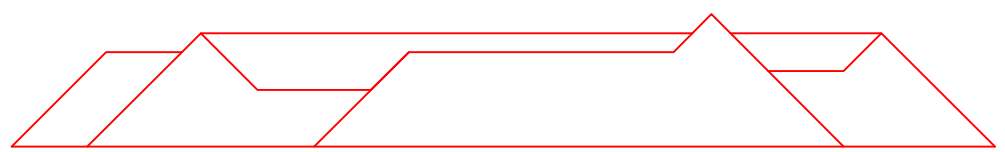


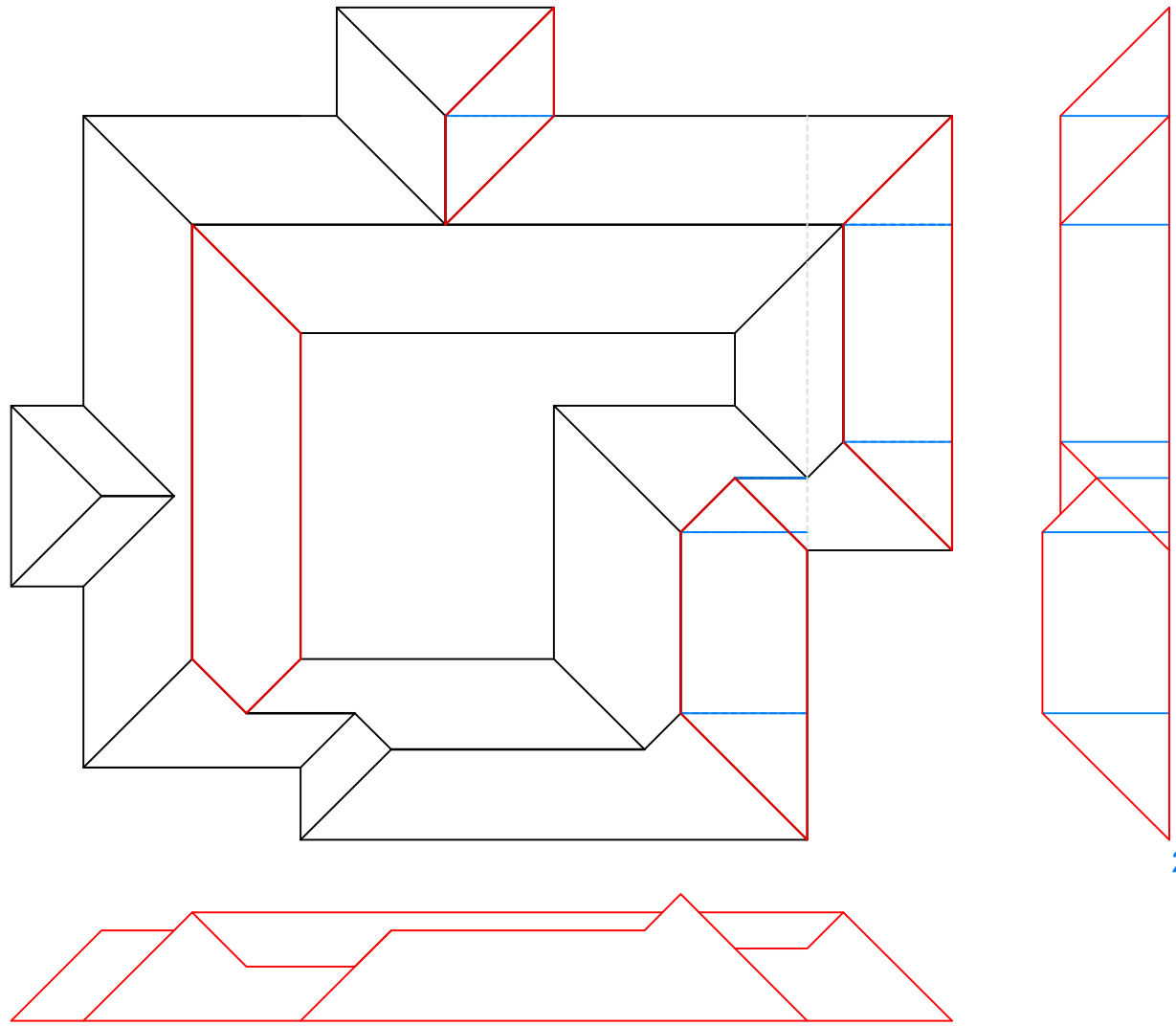




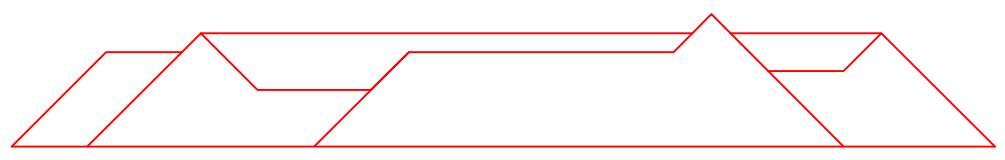
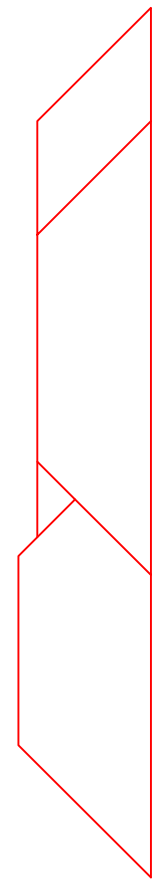
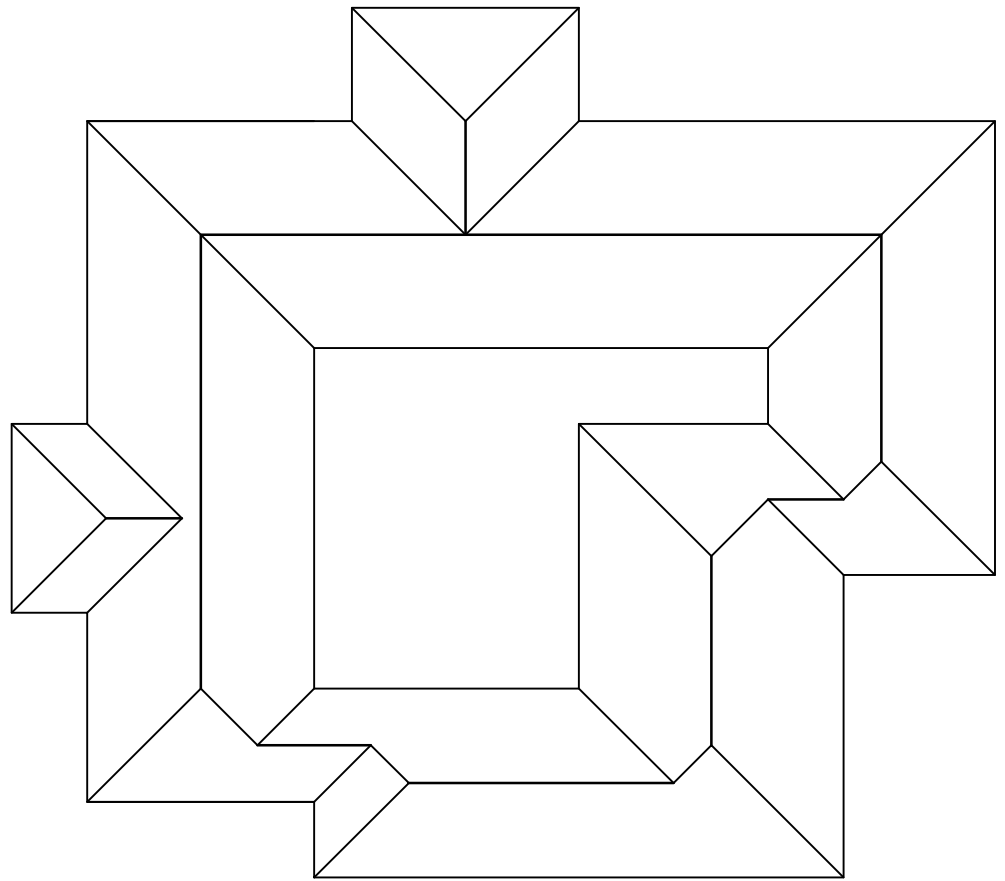


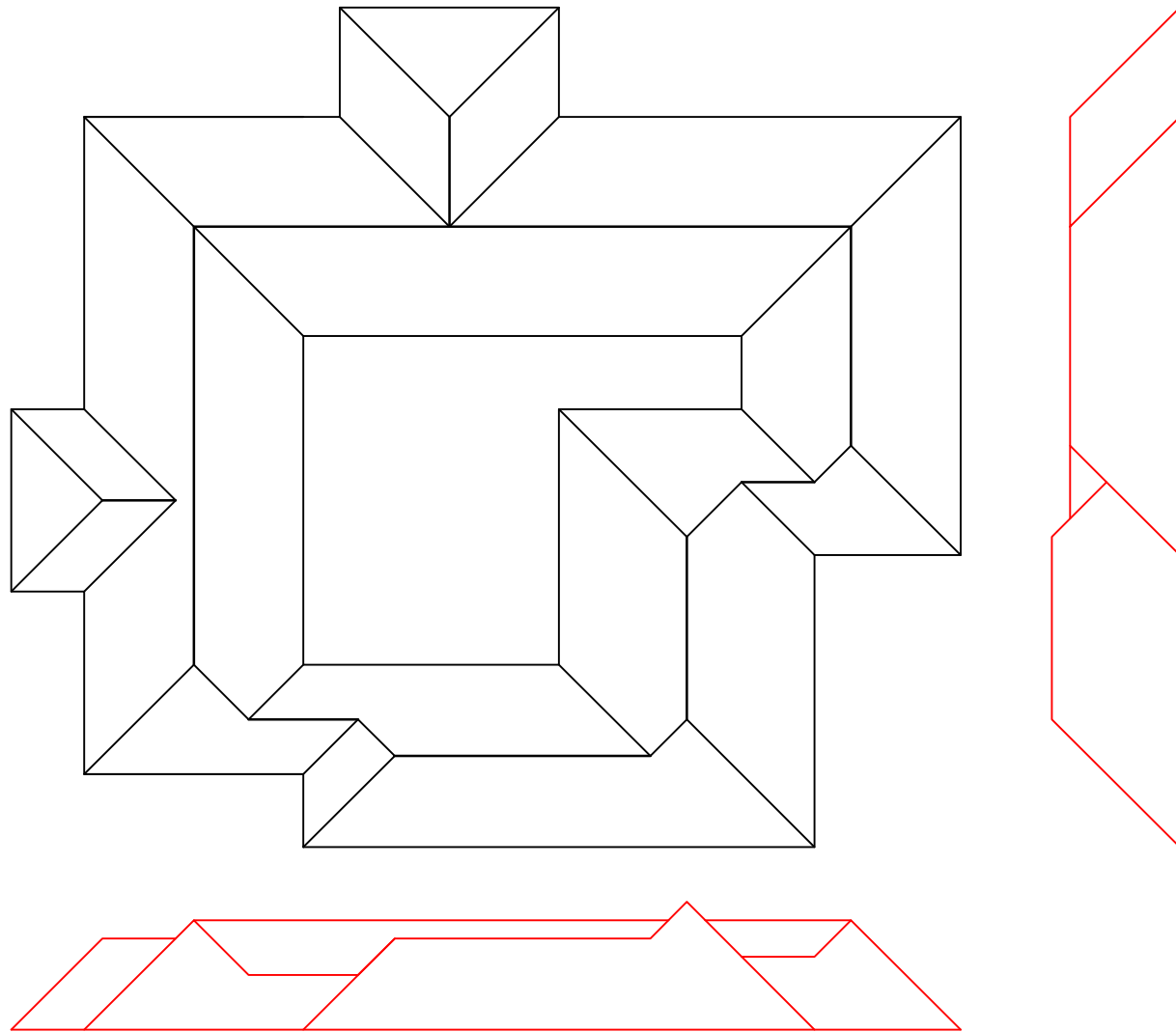
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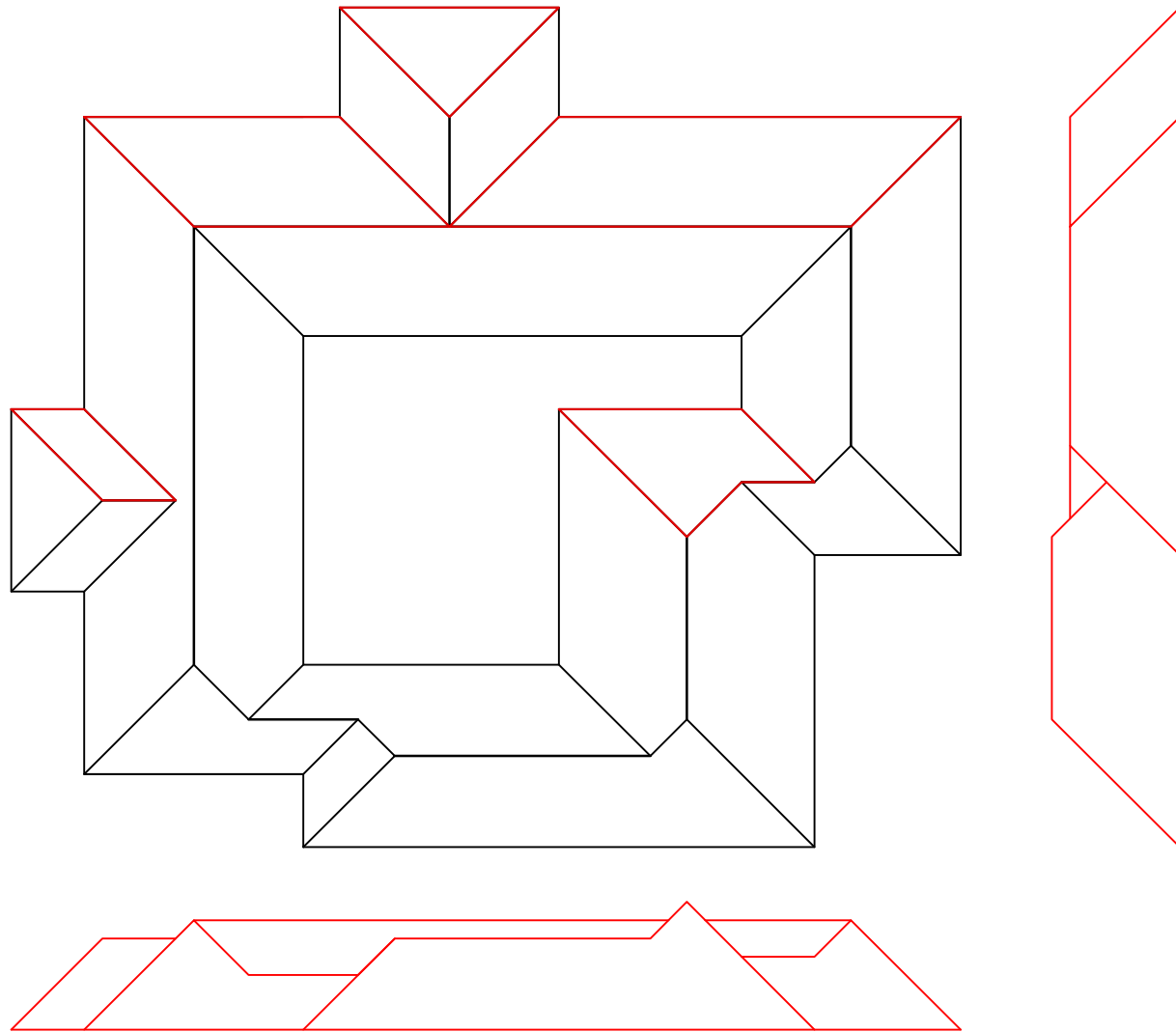


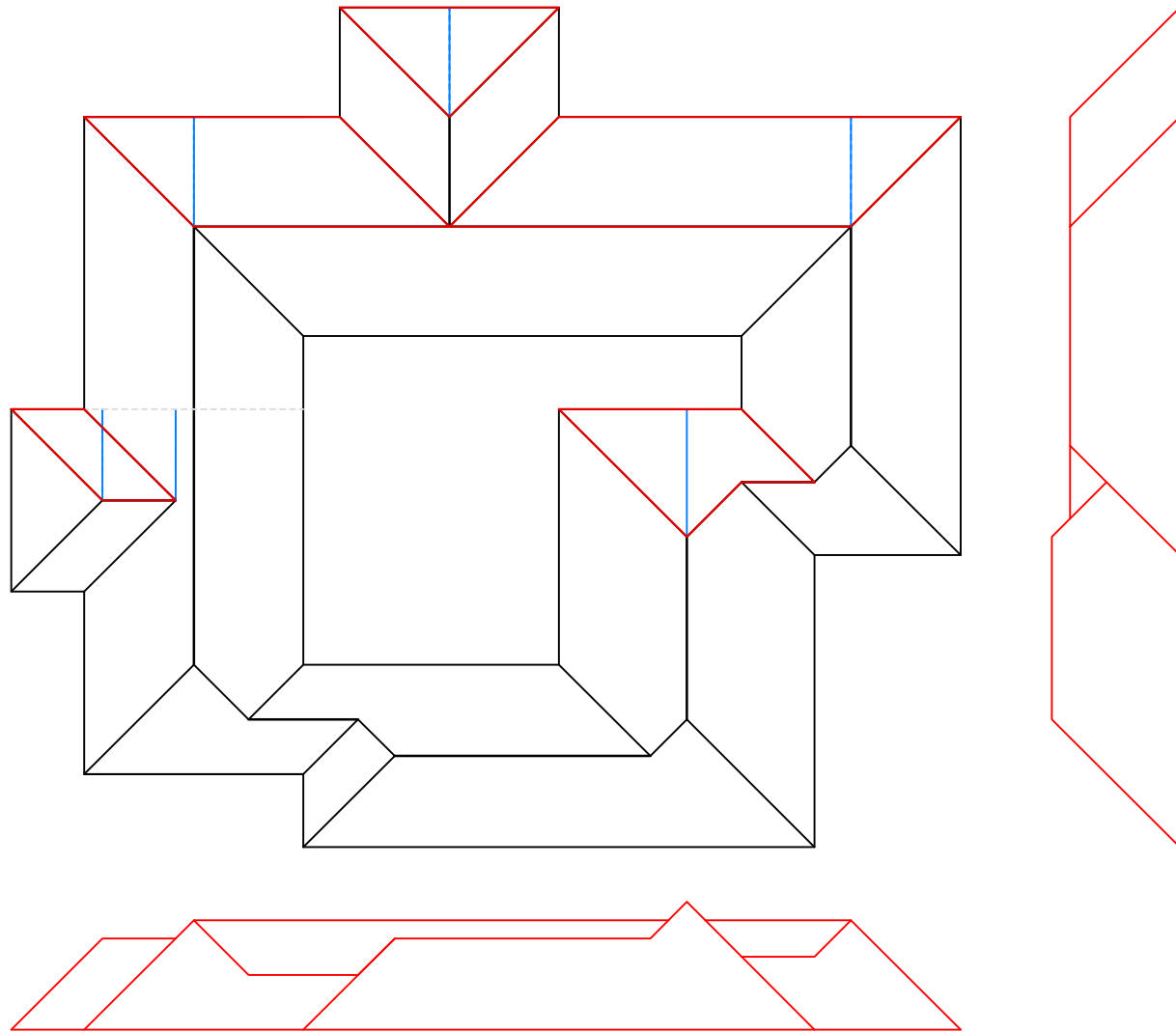
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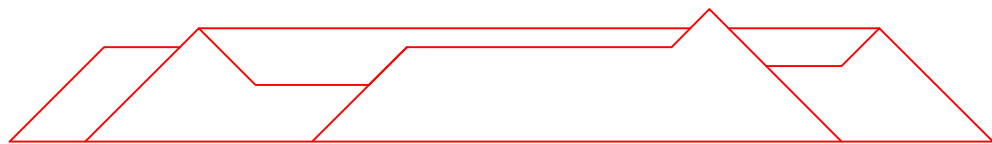
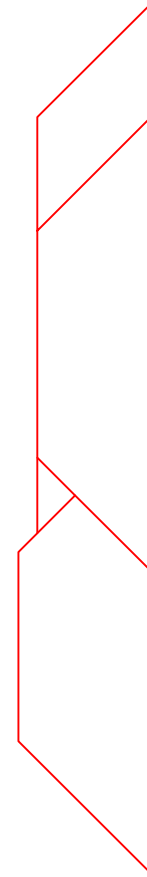
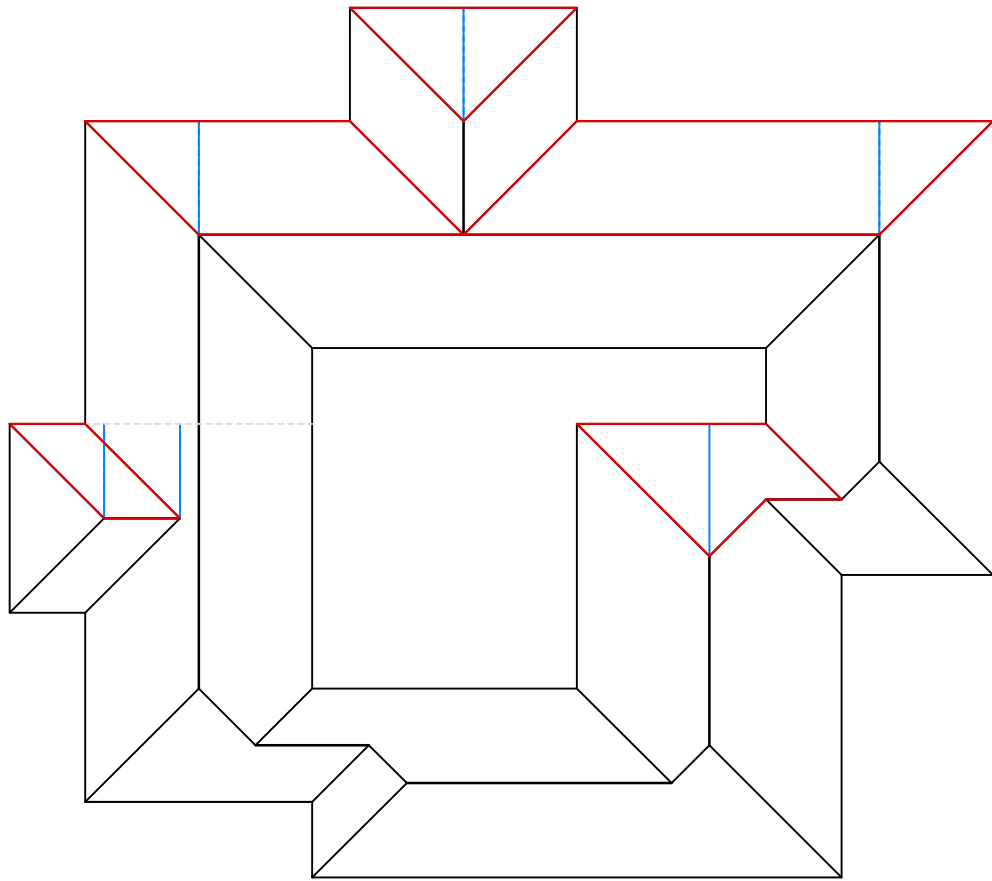


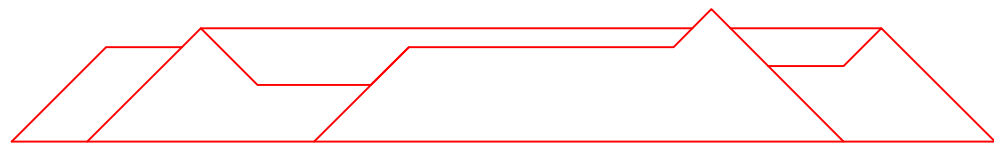
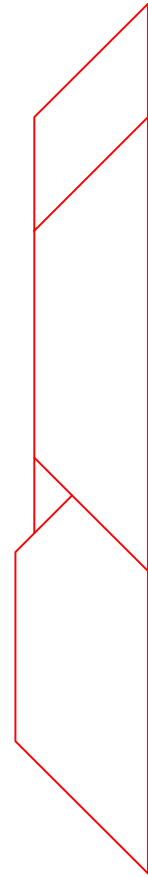
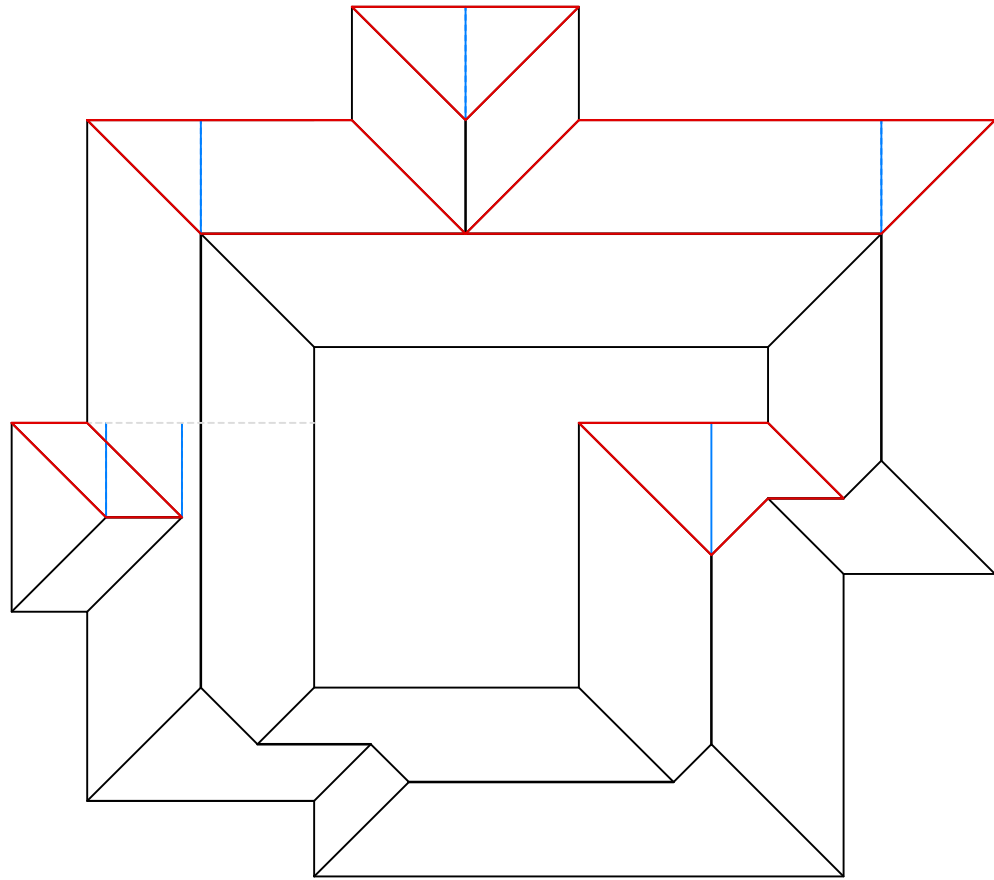
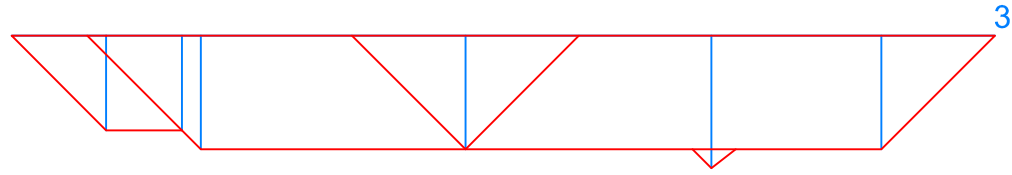


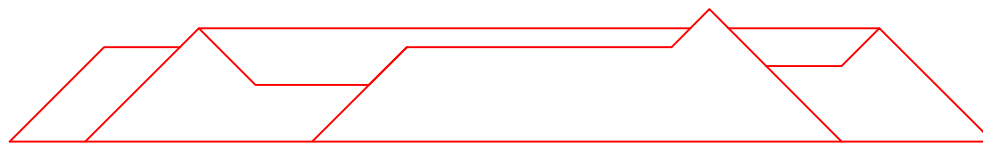
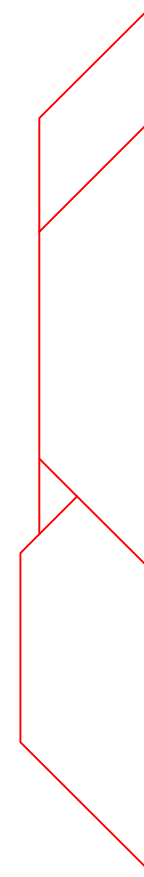
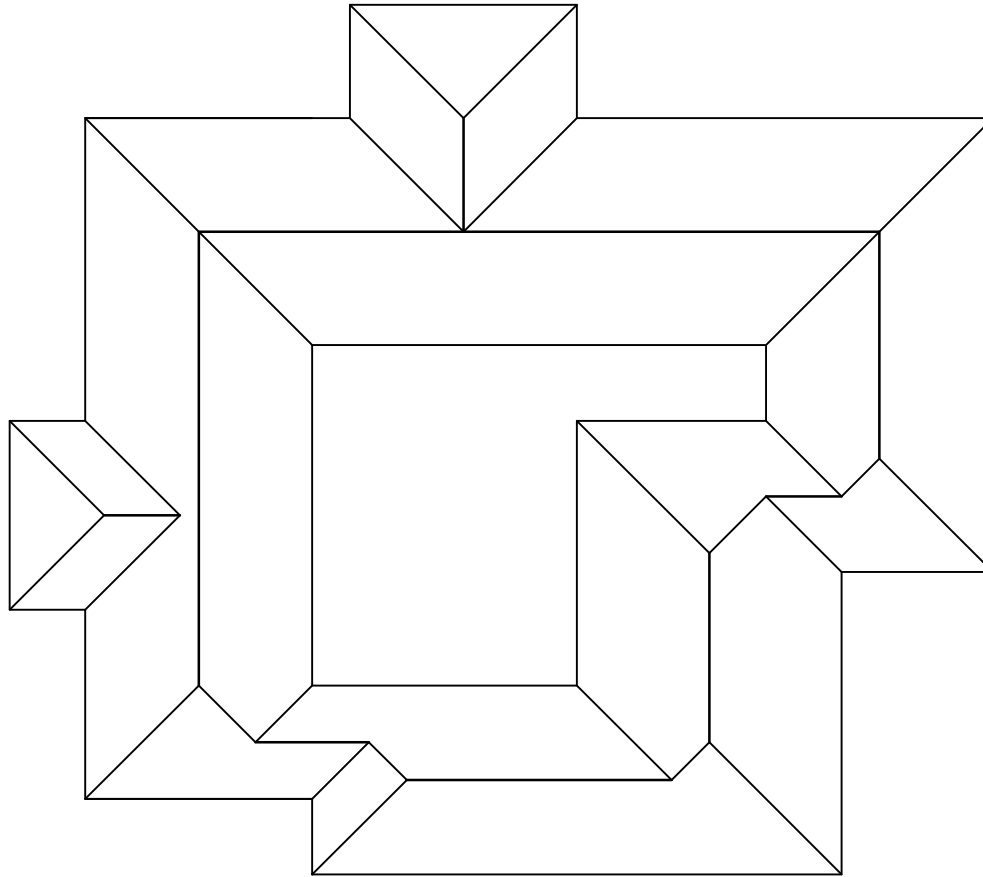
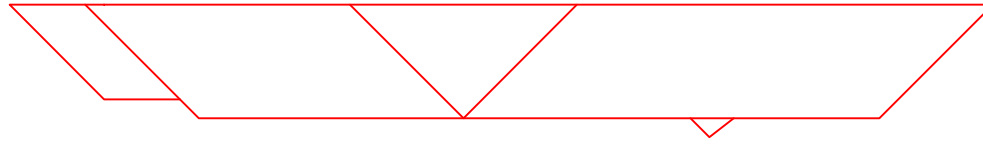


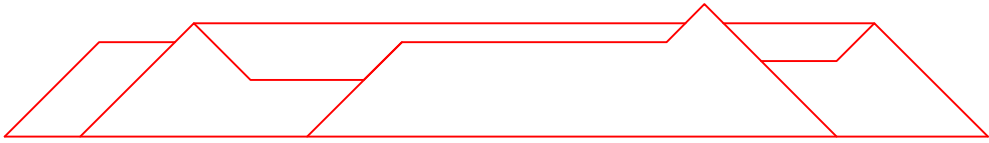
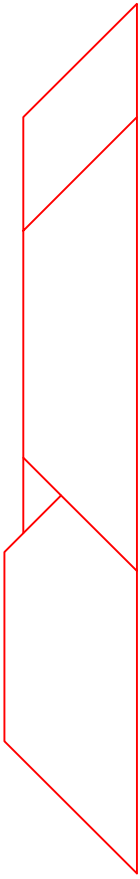
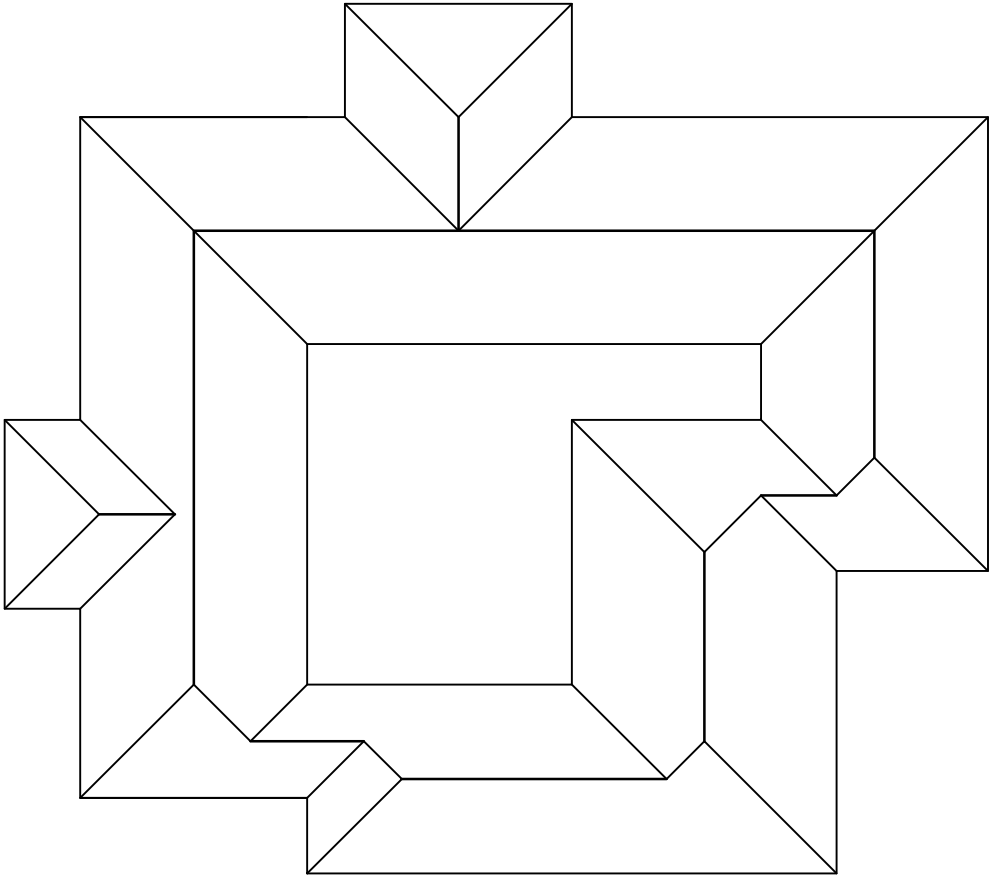
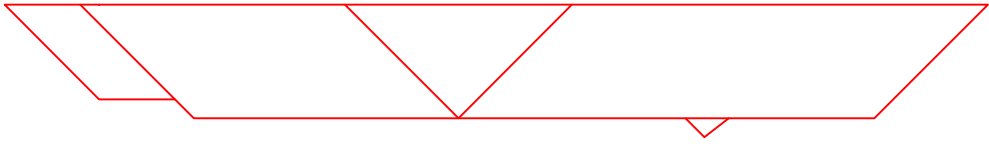




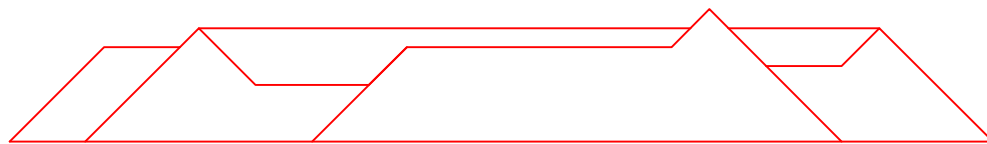
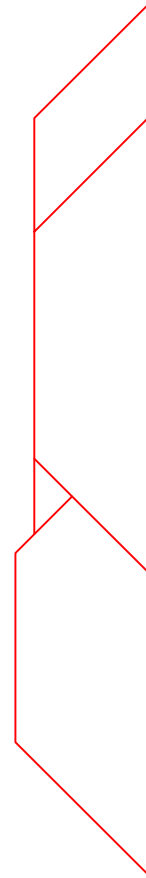
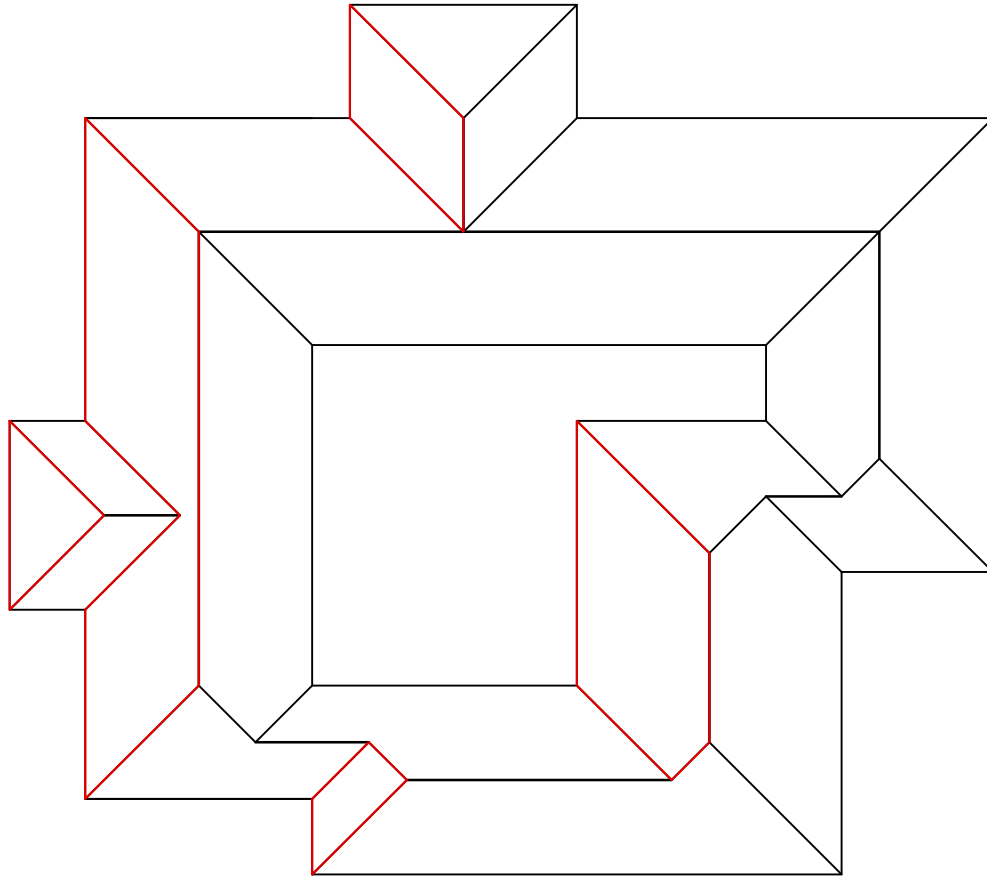
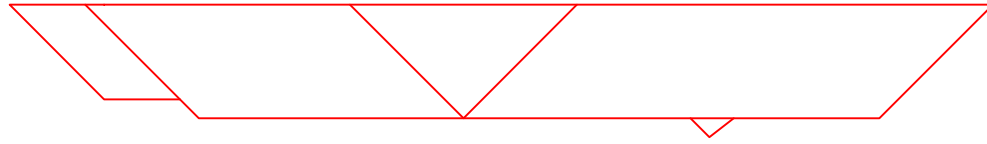




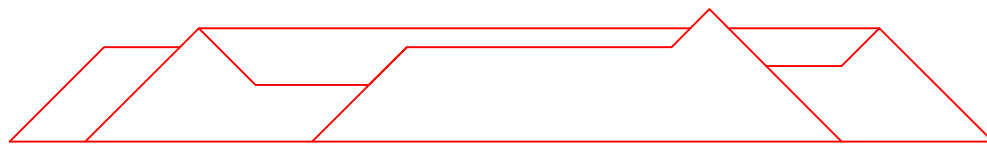
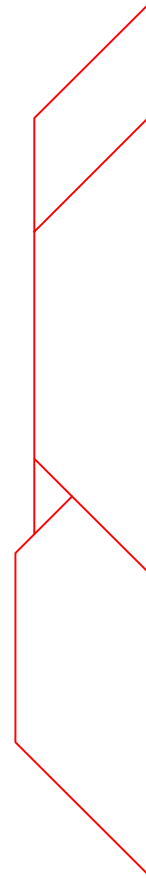
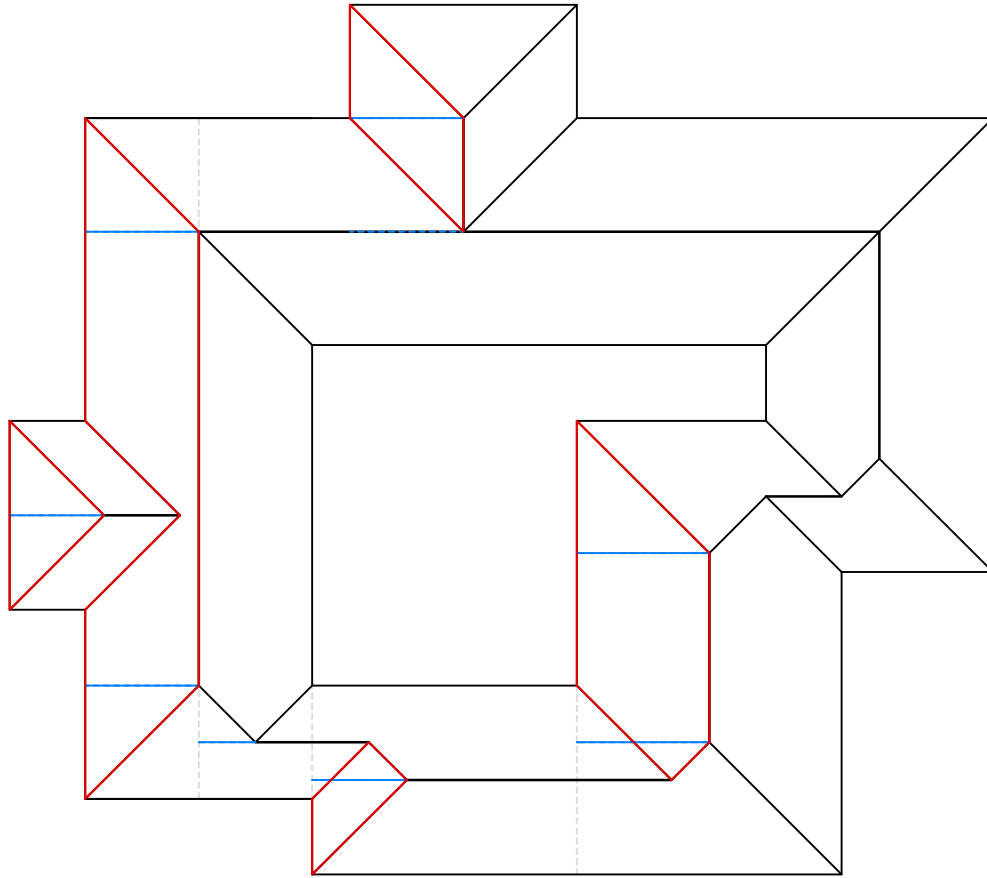
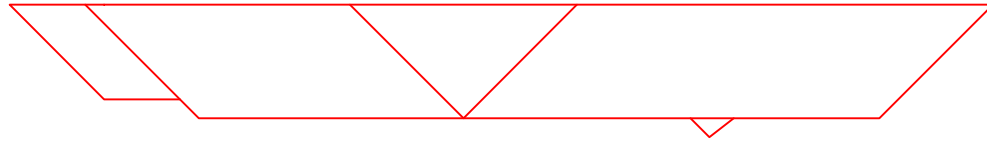




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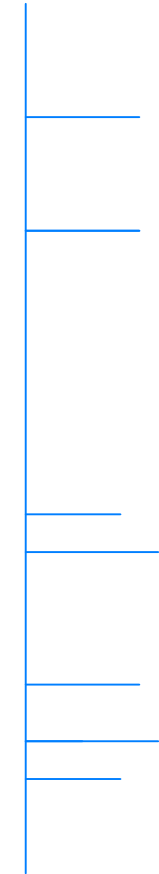
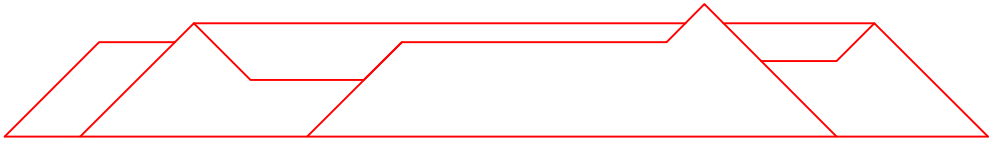
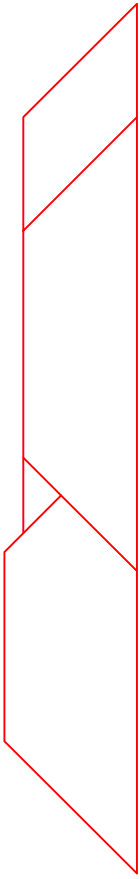
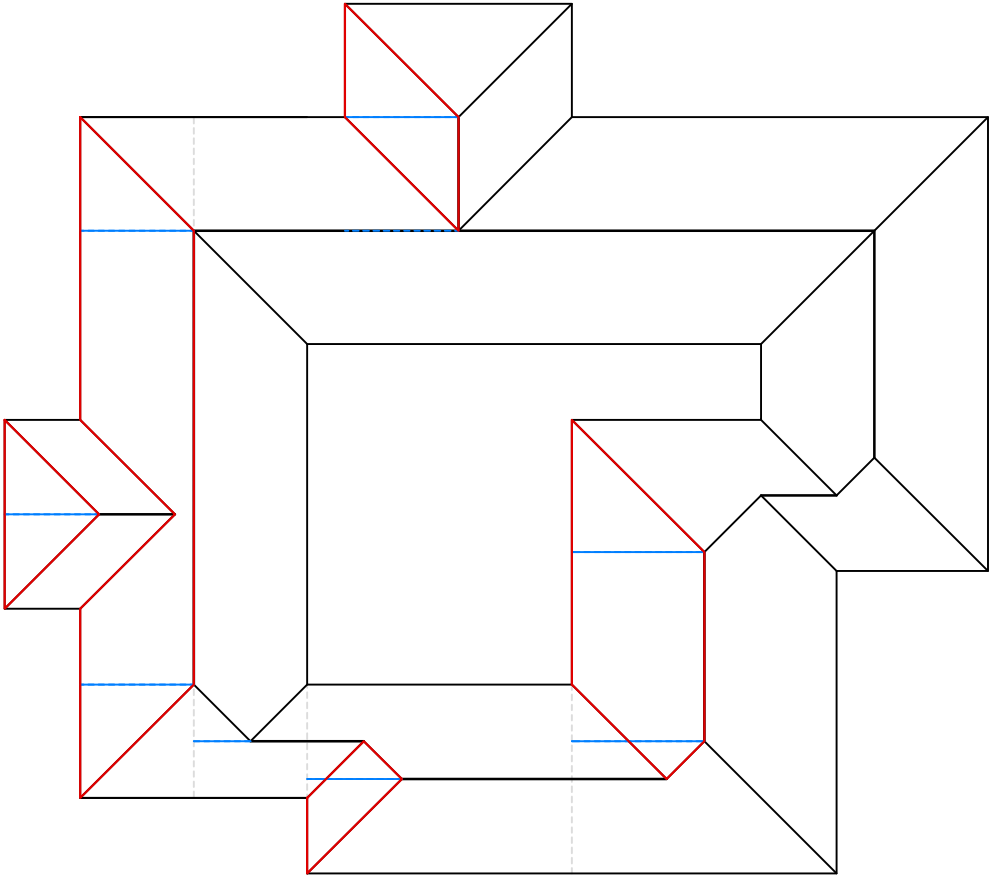
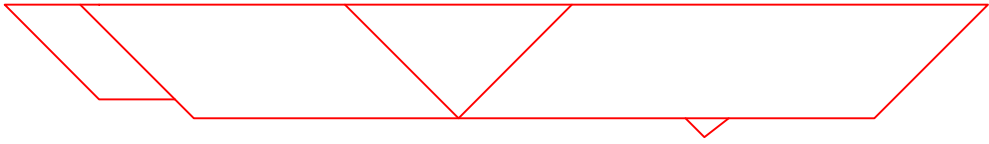


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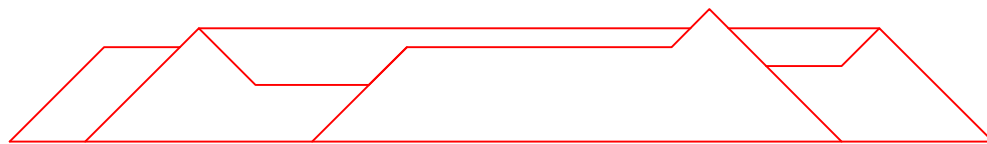
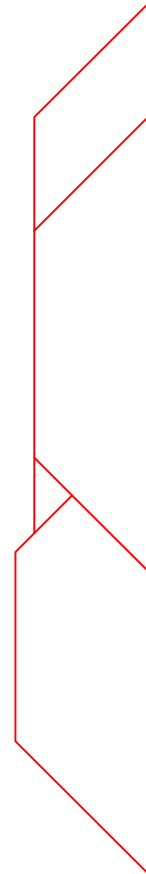
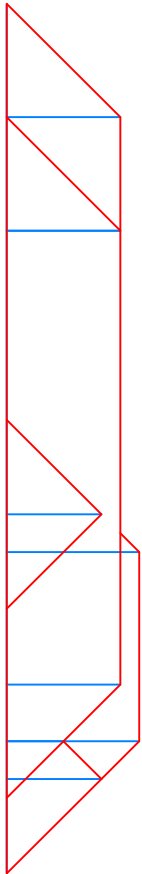
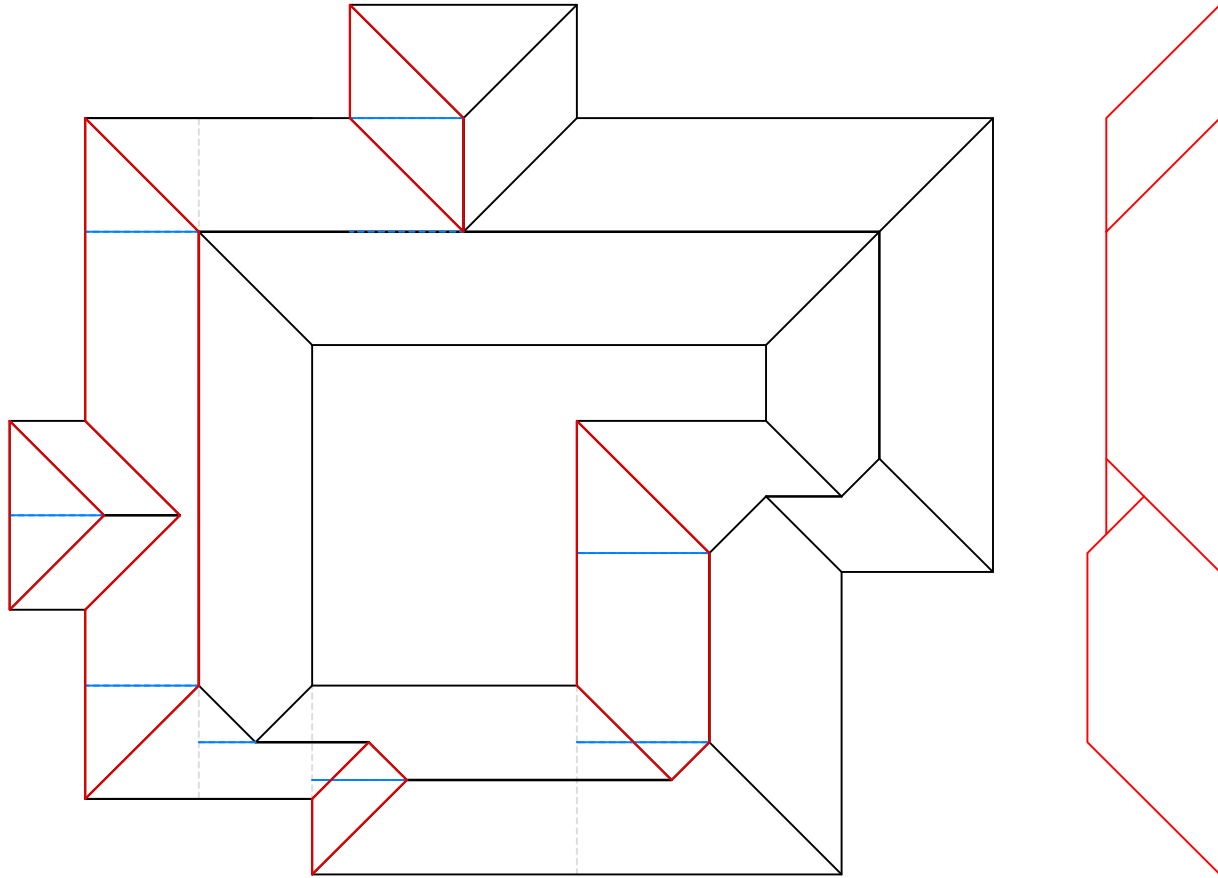
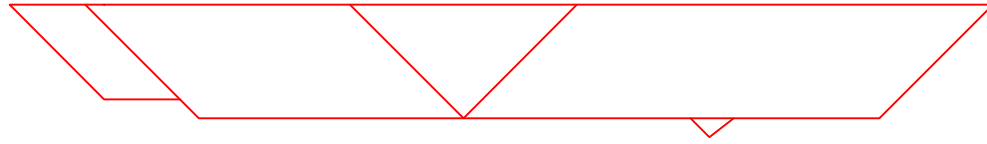


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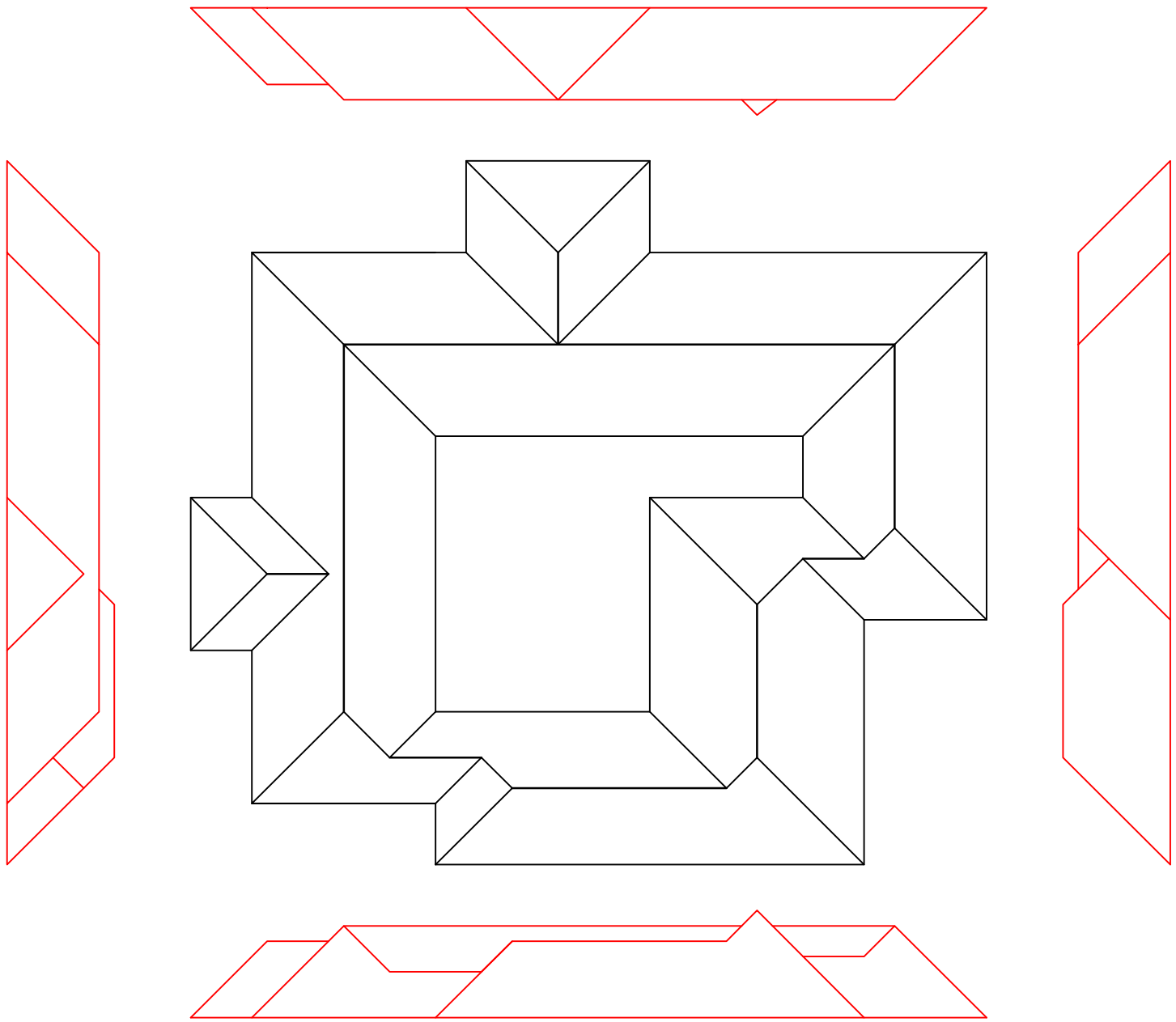




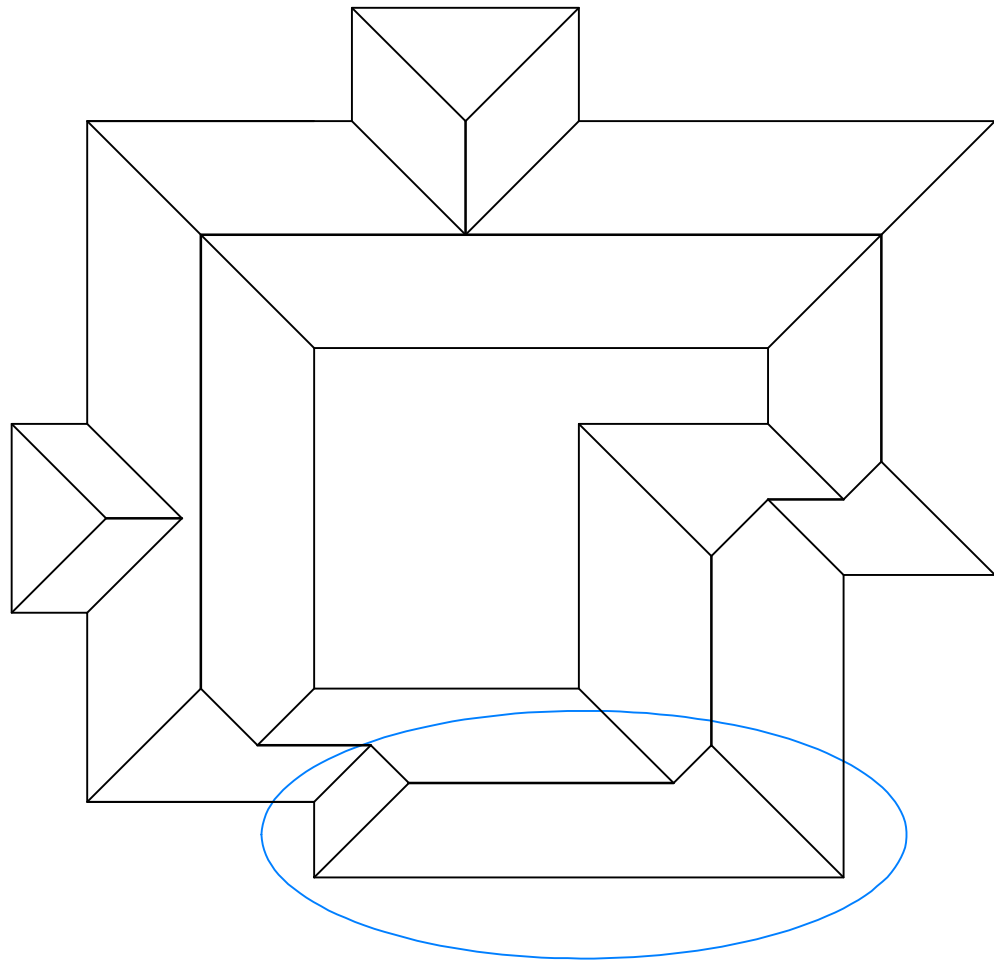
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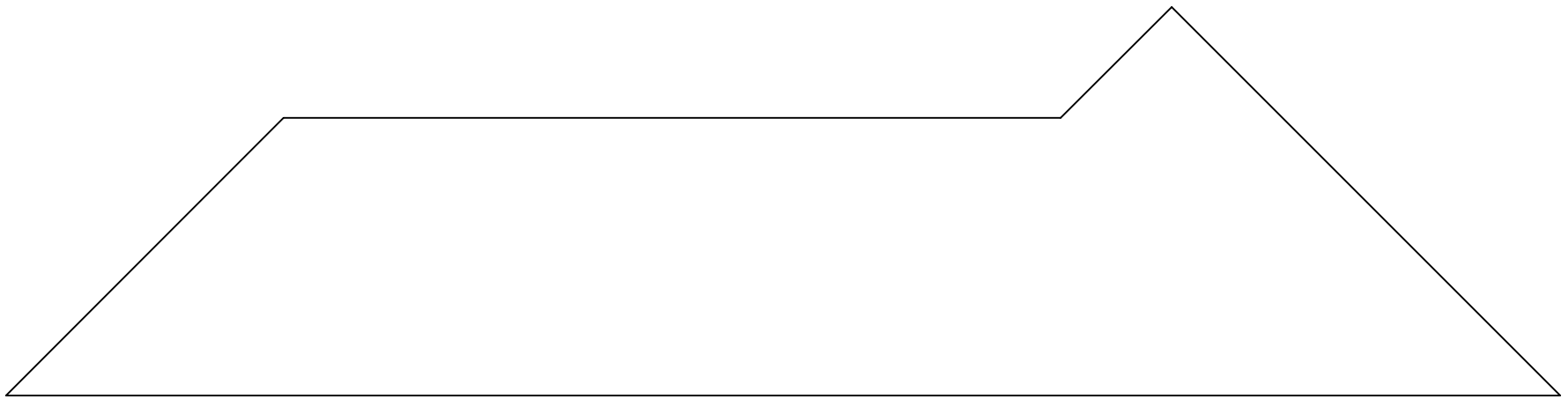


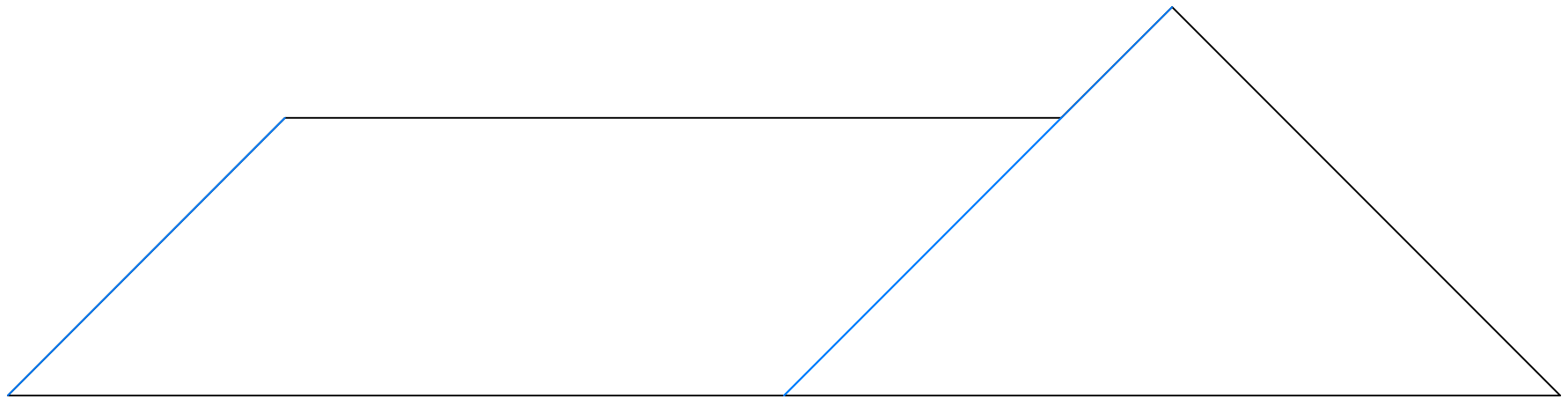
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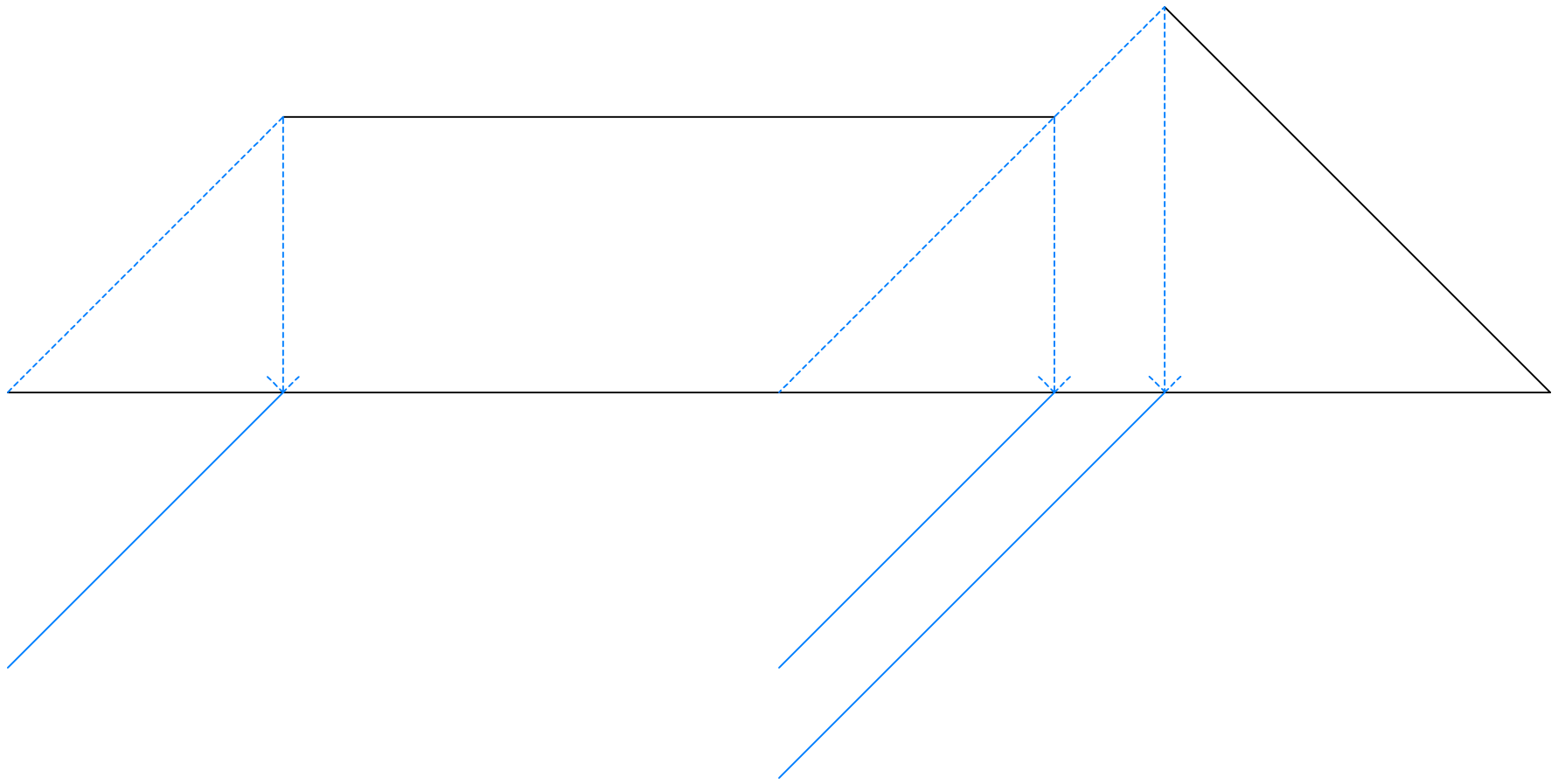


Sklápění

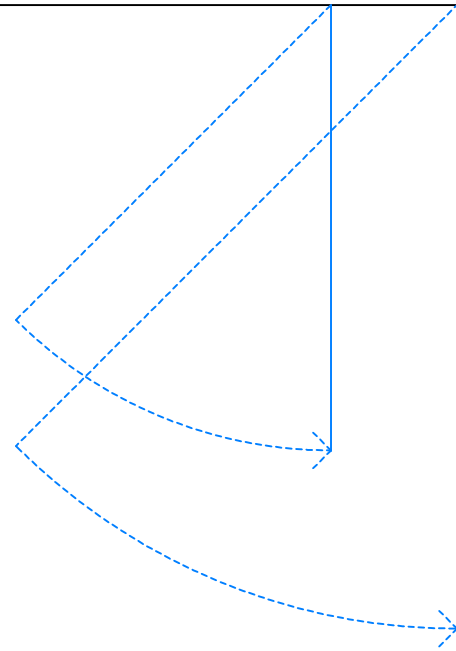
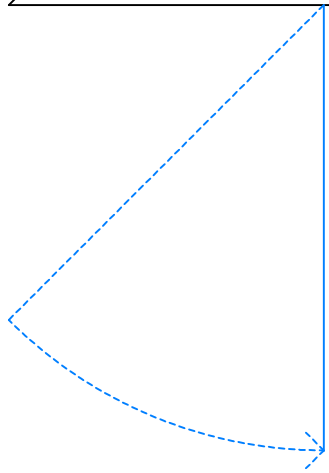
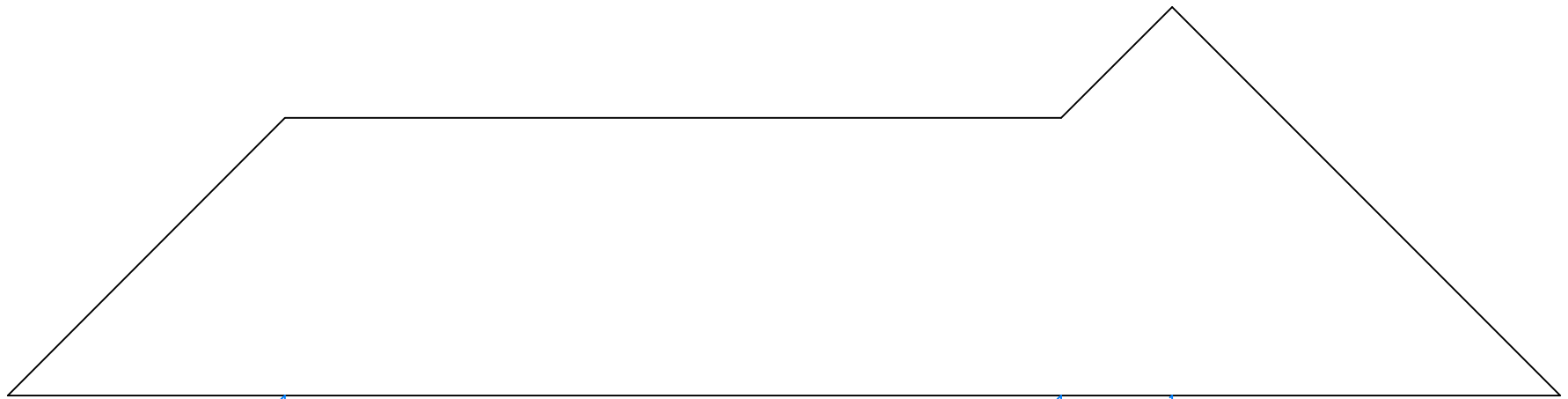


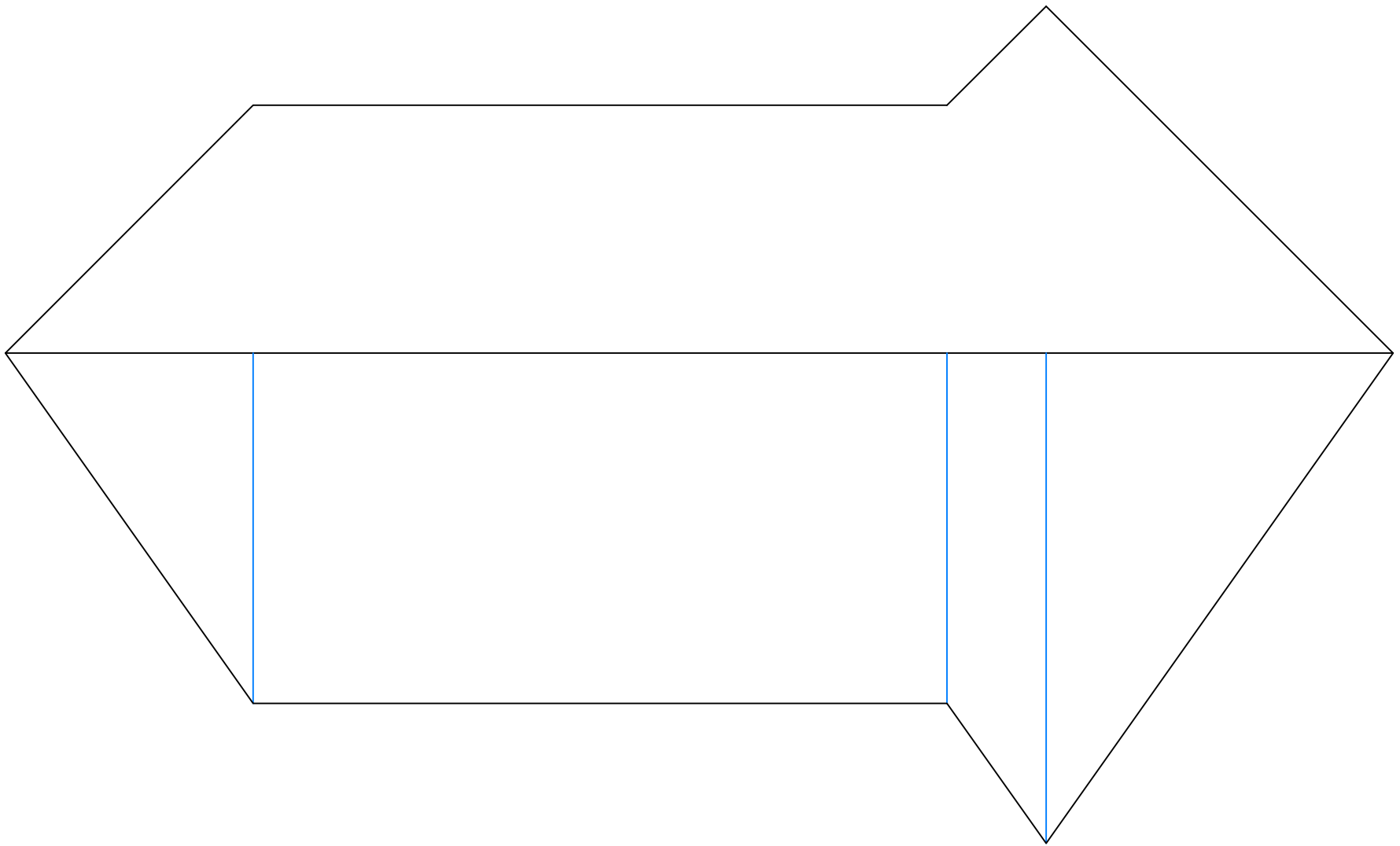


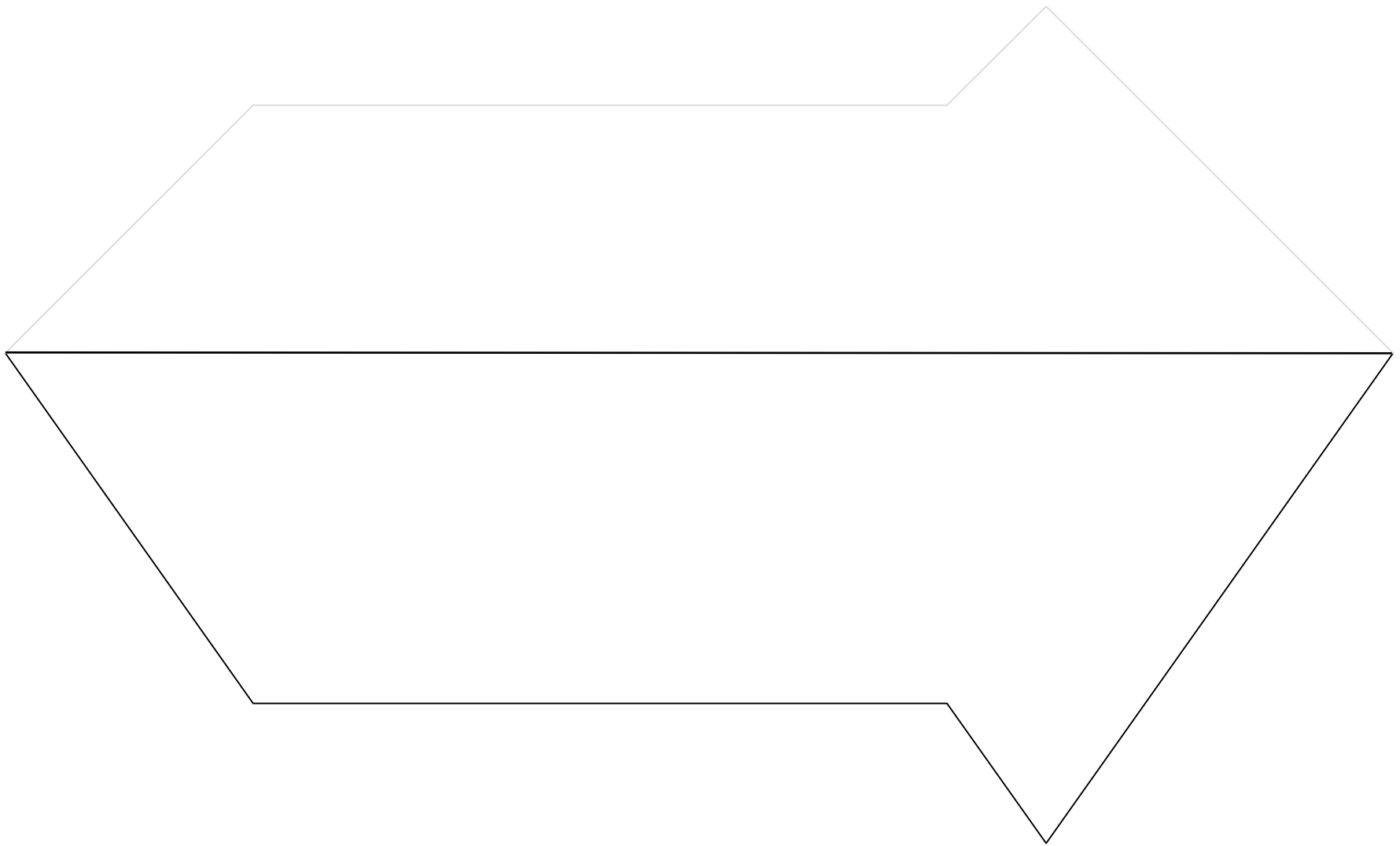


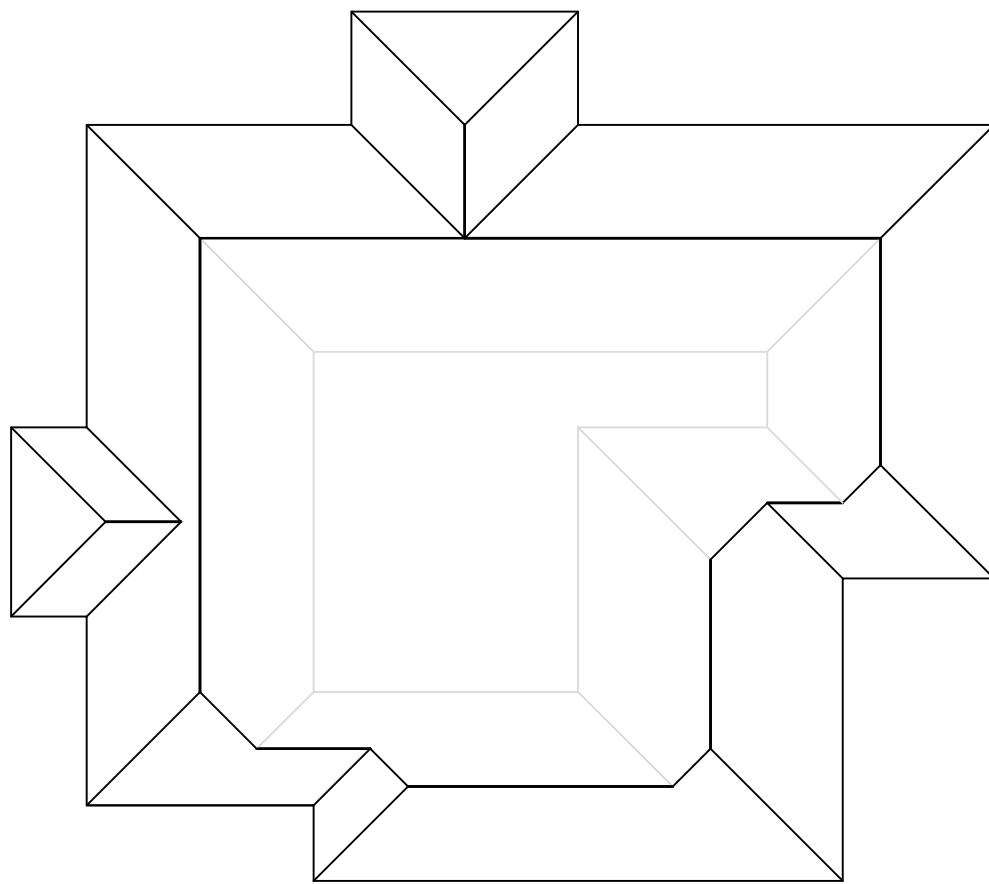


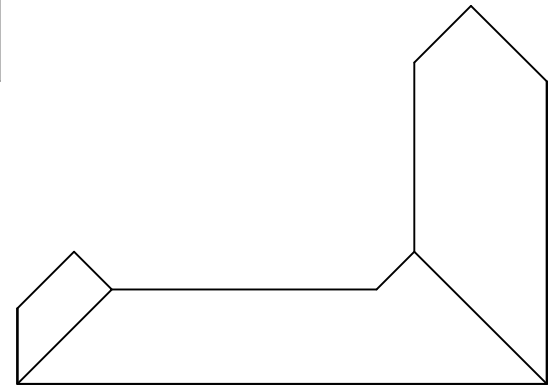
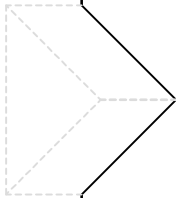
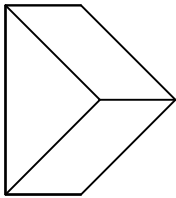
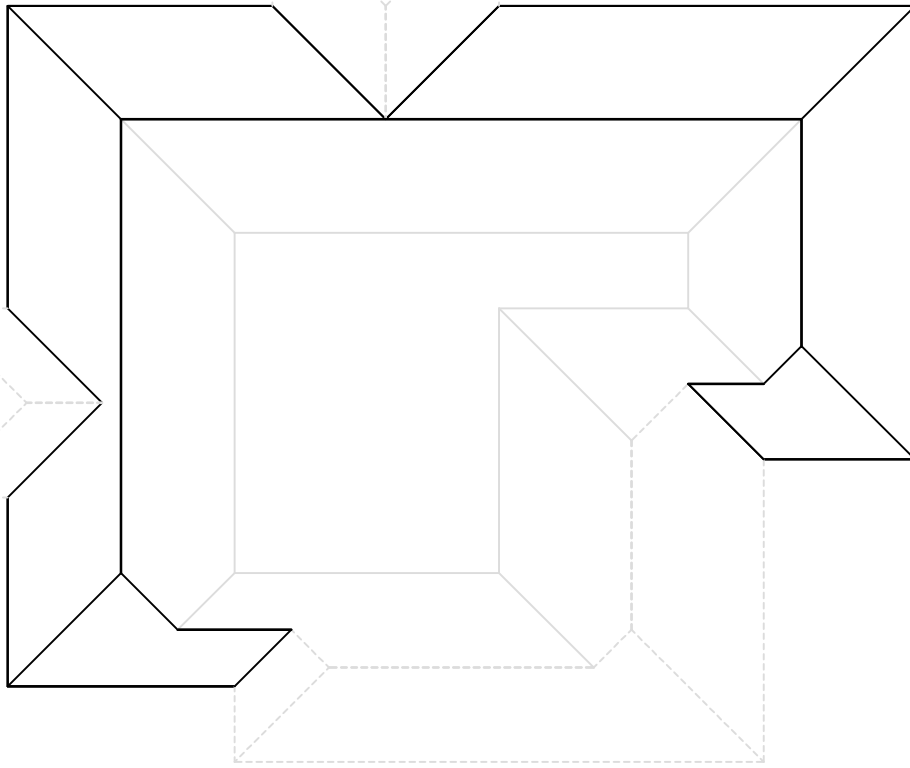
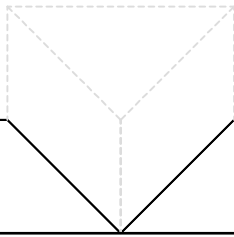
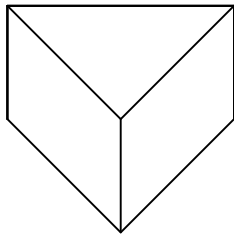


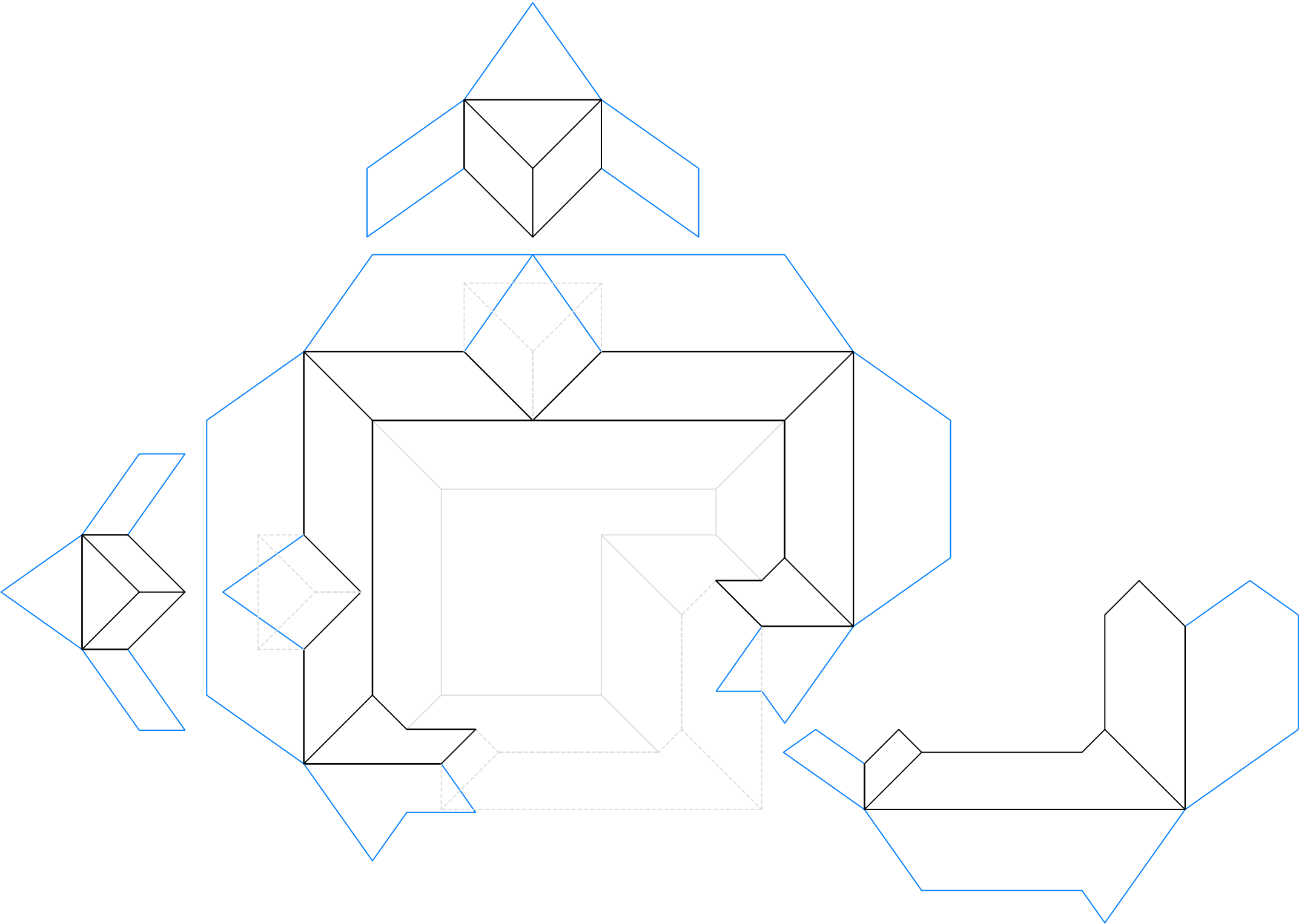


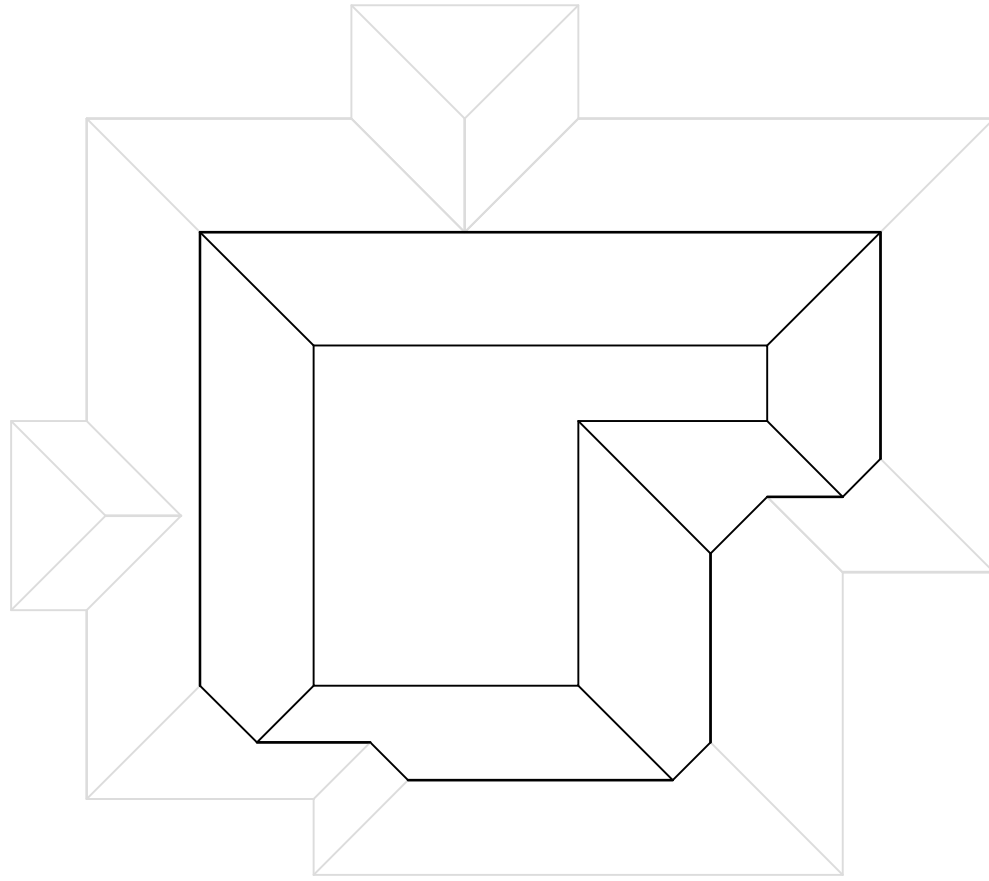


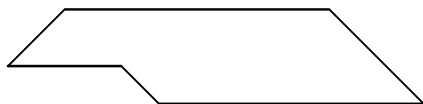
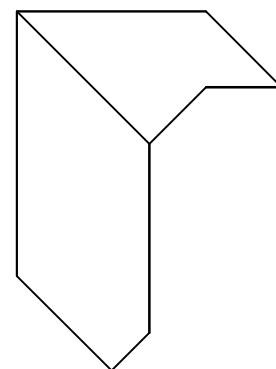
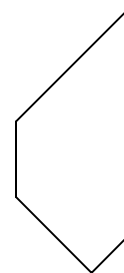
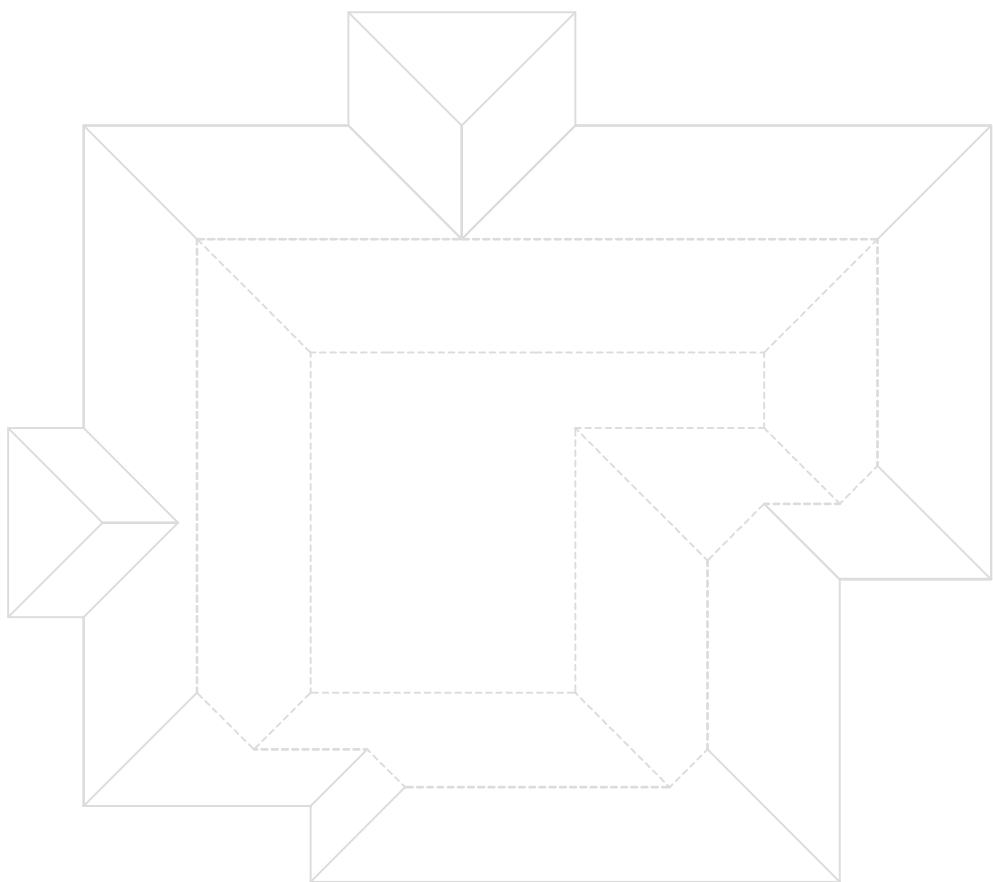
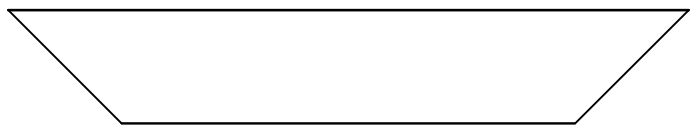




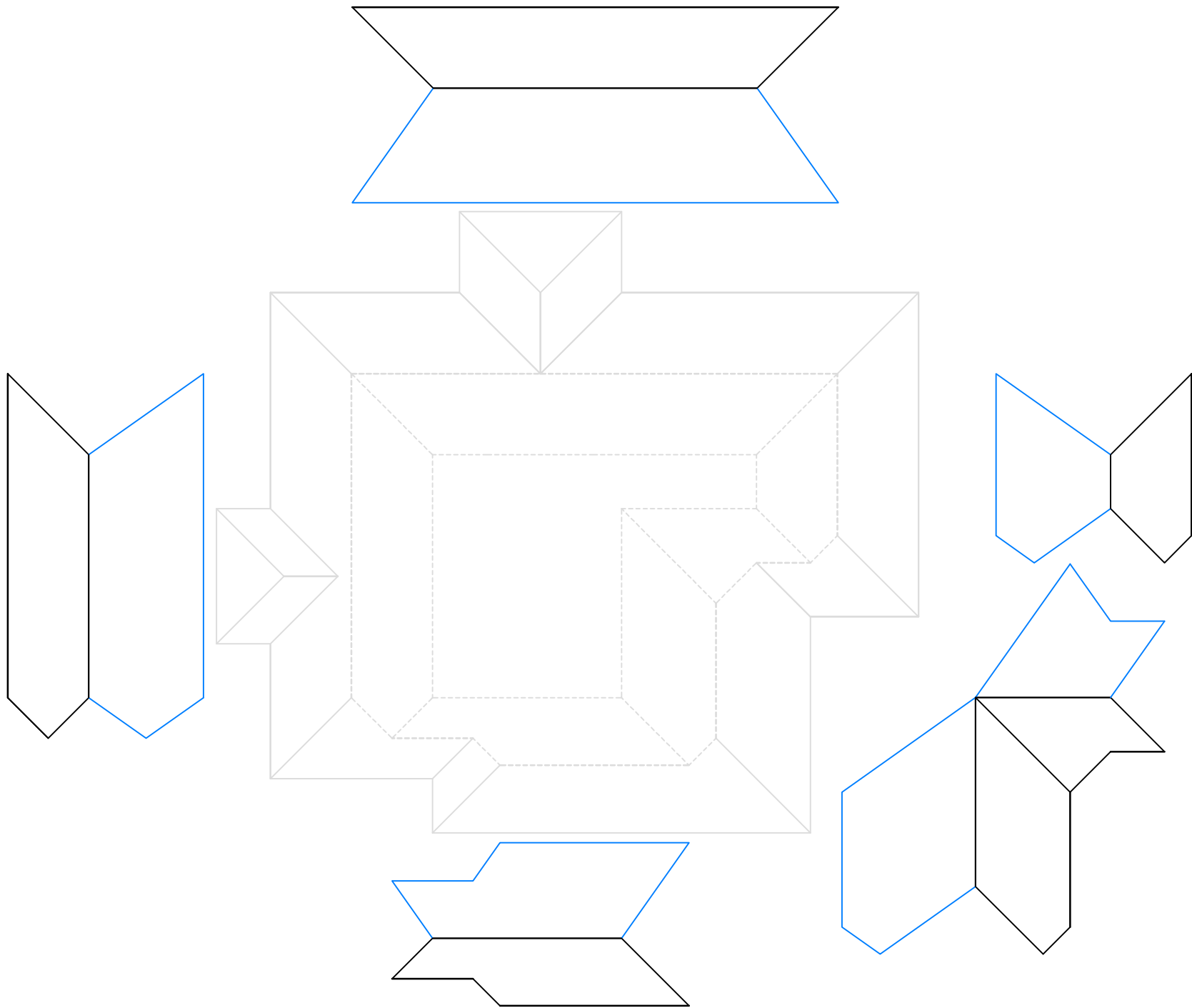












Zdroje:

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