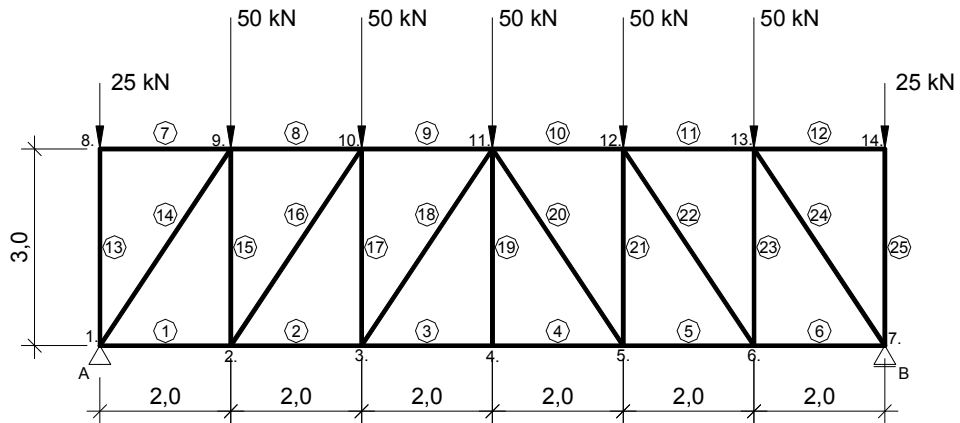


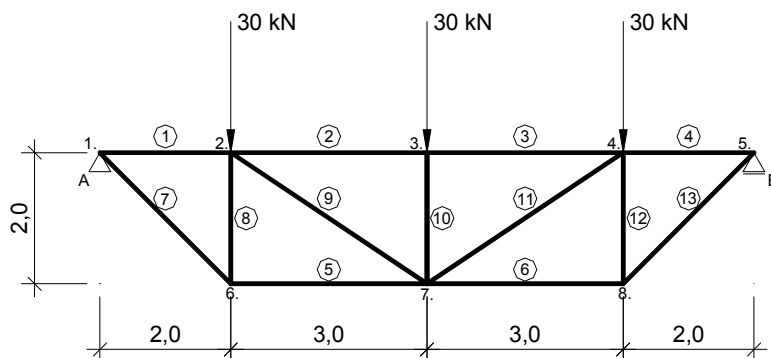
## Oefenopgaven week 2

Bereken de staafkrachten m.b.v. de snedemethode van Ritter voor opgave 2.1 t/m 2.5. Maak twee sneden per vakwerk.

### Opgave 2.1

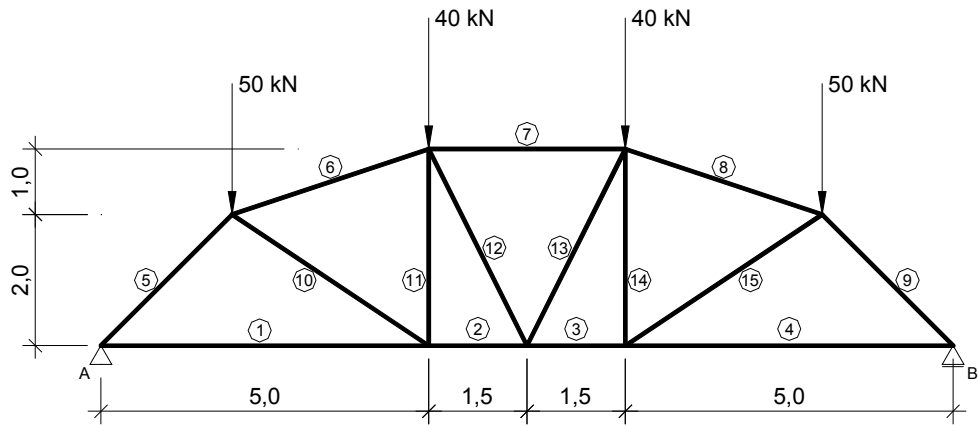


### Opgave 2.2 Bereken de staafkrachten in staaf 7, 2, 9, 5

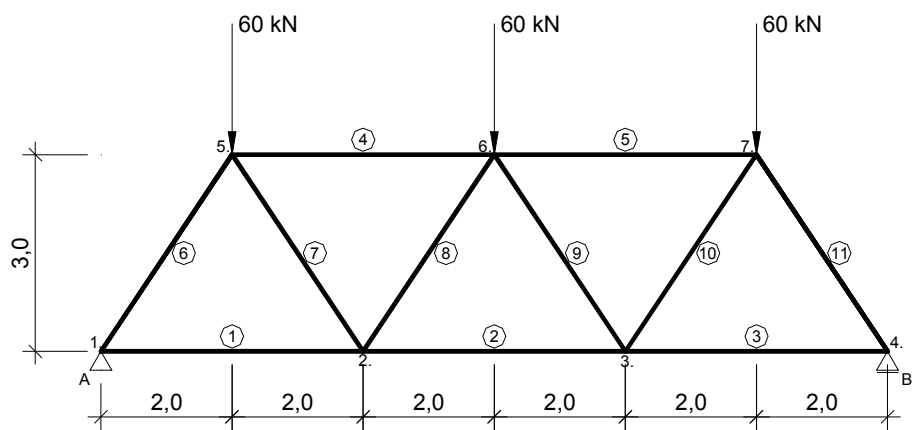


## Oefenopgaven week 2

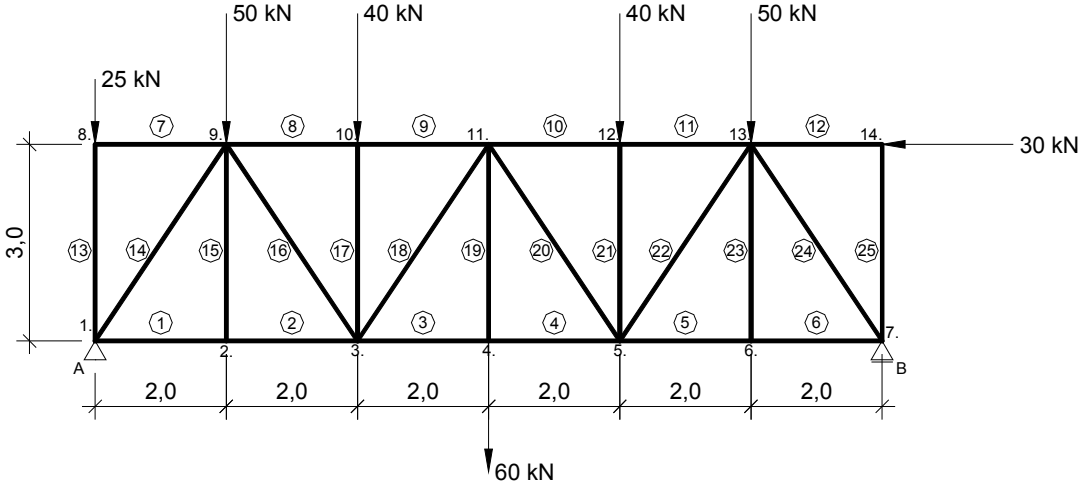
### Opgave 2.3



### Opgave 2.4



Opgave 2.5



## Oefenopgaven week 2

### Opgave 2.1

$$\begin{aligned}F_{v;A} &= 150,0 \text{ kN} \\F_{h;A} &= 0,0 \text{ kN} \\F_{v;B} &= 150,0 \text{ kN} \\F_{h;B} &= 0,0 \text{ kN}\end{aligned}$$

staaf	kracht (kN)
1	83,3
2	133,3
3	150,0
4	150,0
5	133,3
6	83,3
7	0,0
8	-83,3
9	-133,3
10	-133,3
11	-83,3
12	0,0
13	-25
14	-150,2
15	75
16	-90,1
17	25
18	-30,1
19	0,0
20	-30,1
21	25,0
22	-90,1
23	75,0
24	-150,2
25	-25,0

### Opgave 2.2

$$\begin{aligned}F_{v;A} &= 45,0 \text{ kN} \\F_{h;A} &= 0,0 \text{ kN} \\F_{v;B} &= 45,0 \text{ kN} \\F_{h;B} &= 0,0 \text{ kN}\end{aligned}$$

staaf	kracht (kN)
1	-45,0
2	-67,5
3	-67,5
4	-45,0
5	45,0
6	45,0
7	63,6
8	-45,0
9	27,0
10	-30,0
11	27,0
12	-45,0
13	63,6

## Oefenopgaven week 2

### Opgave 2.3

$$\begin{aligned}F_{v;A} &= 90,0 \text{ kN} \\ F_{h;A} &= 0,0 \text{ kN} \\ F_{v;B} &= 90,0 \text{ kN} \\ F_{h;B} &= 0,0 \text{ kN}\end{aligned}$$

staaf	kracht (kN)
1	90,0
2	100,0
3	100,0
4	90,0
5	-127,3
6	-105,4
7	-100,0
8	-105,4
9	-127,3
10	12,0
11	-6,7
12	0,0
13	0,0
14	-6,7
15	12,0

### Opgave 2.4

$$\begin{aligned}F_{v;A} &= 90,0 \text{ kN} \\ F_{h;A} &= 0,0 \text{ kN} \\ F_{v;B} &= 90,0 \text{ kN} \\ F_{h;B} &= 0,0 \text{ kN}\end{aligned}$$

staaf	kracht (kN)
1	60,0
2	100,0
3	60,0
4	-80,0
5	-80,0
6	-108,2
7	36,1
8	-36,1
9	-36,1
10	36,1
11	-108,2

### Opgave 2.5

$$\begin{aligned}F_{v;A} &= 152,5 \text{ kN} \\ F_{h;A} &= 30,0 \text{ kN} \\ F_{v;B} &= 112,5 \text{ kN} \\ F_{h;B} &= 0,0 \text{ kN}\end{aligned}$$

staaf	kracht (kN)
1	55,0
2	55,0
3	131,7
4	131,7
5	75,0
6	75,0
7	0,0
8	-136,7
9	-136,7
10	-146,7
11	-146,7
12	-30,0
13	-25,0

staaf	kracht (kN)
14	-153,2
15	0,0
16	93,1
17	-40,0
18	-45,1
19	60,0
20	-27,0
21	-40,0
22	75,1
23	0,0
24	-135,2
25	0,0