Remarks: See §4.5, page 130 till 144

Hints:

Also see §4.5.4, page 140 till 144

Answers:

1a. Not a truss because of the connection between the diagonal beams.
1b. si
1c. $n = 3$

2a. Not a truss because of the connection between the vertical and diagonal beam.
2b. sd

3a. Not a truss
3b. si
3c. $n = 9$

Answer exercise 3:

- Number of support reactions:
  $r = 2 + 1 = 3$
- Number of interaction forces:
  7 single connections
  4 double connections
  each intersection has two interaction forces
  $v = 7 \times 2 + (4 \times 2) \times 2 = 30$
- Number of equilibrium equations:
  $e = 8 \times 3 = 24$
- Statically indeterminate of the ninth degree.
  $n = r + v - e = 3 + 30 - 24 = 9$