Remarks: See §4.3, page 120 till 126

Answers:

r is the number of support reactions in a support

1. 1 – hinged support; $r = 2$
   5 – hinged support; $r = 2$

2. 1 – fixed support; $r = 3$
   4 – hinged support; $r = 2$

3. 1 – fixed support; $r = 3$
   4 – hinged support; $r = 2$

4. 1, 5 and 7 – fixed supports; $r = 3$

5. 1 – bar support; $r = 1$ (also see next page)
   6 – hinged support; $r = 2$

6. 1 and 4 – fixed supports; $r = 3$

7. 1 – hinged support; $r = 2$
   6 – roller support; $r = 1$

8. 1 – hinged support; $r = 2$
   4 – roller support; $r = 1$

9. 1 and 5 – fixed supports; $r = 3$
   6 eand 10 – bar supports; $r = 1$ (also see next page)

10. 2 en 6 – roller supports; $r = 1$
    3 – hinged support; $r = 2$

11. 1 en 7 – hinged supports; $r = 2$

See next page

Remarks for exercises 4.9-5 and 4.9-9:

While answering these exercises we assumed that the loads don't work at the bars of a bar support.
A bar support is only loaded at the ends, see page 120, figure 4.11a
When the bars are being loaded the problem changes, and the bar support becomes a hinged support.