## ANSWERS – VOLUME 1: EQUILIBRIUM

Chapter 7, Gas Pressures and Hydrostatic Pressures

Remarks: See §7.2, example 2, page 250 till 252

Answers:

a.  $n = 5000 \,\mathrm{N/m}$ 

b. at the ring beam:  $n_v = 3000 \text{ N/m}$ 

 $\rightarrow q_{\text{ringbeam}} \ge 3000 \,\text{N/m}$ 

c. The horizontal load on the ring belt is an equally distributed load pointing to the inside of the structure and equal to the horizontal component of the membrane force:  $n_{\rm h} = 4000 \,\text{N/m}$ 

This creates a compressive force in the ring beam:  $N_{\text{ringbeam}} = -60 \text{ kN}$ 

Last update: 27-04-07