ANSWERS KEY _ Hw2

1) $\sigma_t = 6.15\ Mpa$; $\sigma_c = -8.69\ Mpa$

2) $\sigma_s = 166.1\ Mpa$; $\sigma_c = -7.55\ Mpa$

3) $F_{bolt} = 3164\ N$; $D = 8.98\ mm \approx 9\ mm$

4) Point H
   $\sigma_H = 0$; $\tau_H = 24.25\ Mpa$
   Point
   $\sigma_K = 62.54\ Mpa$; $\tau_K = 21.38\ Mpa$

5) $\tau_b = 60.1\ Mpa$

6) $\sigma_A = -\dfrac{8181.71}{t} Mpa$; $\sigma_B = \dfrac{10540}{t}\ Mpa$

7) $F_A = 8.8\ kN$; $F_B = 2.53\ kN$; $F_C = 4.86\ kN$