

6.1 c) 2)

$$i) [JJ]_h = J_{(h-1)/2} \left( \frac{h K^2}{4 + 2K^2} \right) - J_{(h+1)/2} \left( \frac{h K^2}{4 + 2K^2} \right)$$

$$K_3 = \sqrt{3(1+K_1^2)-2}$$

$$[JJ]_3 = J_{(1)} \left( \frac{3(3(1+K_1^2)-2)}{4 + 2(3(1+K_1^2)-2)} \right) - J_{(2)} \left( \frac{3(3(1+K_1^2)-2)}{4 + 2(3(1+K_1^2)-2)} \right)$$

$$[JJ]_1 = J_0 \left( \frac{K_1^2}{4 + 2K_1^2} \right) - J_{(1)} \left( \frac{K_1^2}{4 + 2K_1^2} \right)$$

$$\mu_h = \left( \frac{h [JJ]_h^2}{[JJ]_1^2} \right)^{1/3}$$

$$P_h = \left[ \left( \frac{1}{8\pi} \right) \left( \frac{1}{J_A} \right) \left( \frac{\sqrt{3(1+K_1^2)-2} [JJ]_h}{(1 + \frac{(3(1+K_1^2)-2)^2}{2})} \right)^2 \left( \frac{\lambda_1^2}{2\pi\sigma_x^2} \right) \right]^{1/3}$$

ii)

$$P_h/P_1 = \frac{\left( \frac{\sqrt{3(1+K_1^2)-2} [JJ]_h}{(1 + \frac{(3(1+K_1^2)-2)^2}{2})} \right)^2}{\left( \frac{K_1 [JJ]_1}{1 + K_1^2/2} \right)^2}$$