

Panel 1

Complex HW

① Show that $u(x,y)$ is harmonic and find harm. conjugate:

a) $u(x,y) = 2x - x^3 + 3xy^2$

b) $u(x,y) = \frac{y}{x^2+y^2}$

② Prove that if $v(x,y)$ and $V(x,y)$ are both harmonic conjugates of $u(x,y)$ then v and V can differ by at most a constant.

more soon

Panel 2