Start with: $V_u - (1-\lambda)\delta V_u - \lambda\delta G(w^*)V_u = b + \lambda\delta \int_{w^*}^{\infty} V_e(w)\,dG(w)$

Consider the LHS and group V_u:

$$V_u\left[1 - (1-\lambda)\delta - \lambda\delta G(w^*)\right]$$

add/subtract $\lambda\delta\int_{w^*}^{\infty} dG(w)$ <u>inside</u> the square brackets, and note that $\int_{w^*}^{\infty} dG(w) = 1 - G(w^*)$ (part above w^* of the CDF). So:

$$1 - (1-\lambda)\delta - \lambda\delta G(w^*) - \left[(1 - G(w^*)) - \int_{w^*}^{\infty} dG(w)\right]\lambda\delta$$

$$1 - \delta + \cancel{\delta\lambda} - \cancel{\lambda\delta G(w^*)} - \cancel{\lambda\delta} + \cancel{\lambda\delta G(w^*)} + \lambda\delta\int_{w^*}^{\infty} dG(w)$$

So the LHS becomes $V_u(1-\delta) + \lambda\delta\int_{w^*} V_u\,dG(w)$ and, moving the second item to the RHS we get:

$$V_u(1-\delta) = b + \lambda\delta\left[\int_{w^*}^{\infty} V_e(w)\,dG(w) - \int_{w^*}^{\infty} V_u\,dG(w)\right]$$

And recalling that $V_e(w) = w/1-\delta$ and $V_u = w^*/1-\delta$:

$$\underbrace{V_u(1-\delta)}_{\text{MC of job search}} = b + \frac{\lambda\delta}{1-\delta}\underbrace{\int_{w^*}^{\infty}(w - w^*)\,dG(w)}_{\text{MB of continued search.}}$$

Prob. job offer arrives