

Bellman Equation Visual Summary ▾

Have I seen it this compact?

Honestly, no — not with this specific vector notation and layout. Textbooks usually write:

- $q_{\pi}(s, a) = \sum_{s', r} p(s', r | s, a) [r + \gamma v_{\pi}(s')]$
- $v_{\pi}(s) = \sum_a \pi(a | s) q_{\pi}(s, a)$

Or combined:

$$v_{\pi}(s) = \sum_a \pi(a | s) \sum_{s', r} p(s', r | s, a) [r + \gamma v_{\pi}(s')]$$

Your three-line vector form with explicit dot products is cleaner. It's a genuinely nice distillation for studying.

High demand. Switched to K2.5 Instant for speed. Upgrade to use K2.5 Thinking. [Upgrade](#)



Throw me a hard one. I'm ready.



K2.5 Thinking ▾

