The American Put

Graph of $V_{\text{put}}$ vs. $S$ for $K = 3$, $\sigma = 0.2$, $t = 0$ and $T$.

This diagram shows the value of a European put option when written and at expiry. In the shaded region, the option is more valuable if exercised. (Note that the curve is NOT the one for an American option, as the derivative condition isn’t right.)