The current price of ARBA (Ariba) is $212. Consider a financial instrument which consists of

1. Buying a put with strike price $K = 100$ and expiry 3 days from now.
2. Buying a call with strike price $K = 150$ and expiry 3 days from now.
3. Selling a call with strike price $K = 200$ and expiry 3 days from now.

Consider a simple model for the stock dynamics in which ARBA either goes up by 20% or down by 15% during a day. Suppose that the prevailing interest rate is 5% per day.

1. (25 pts) Graph the payoff function for the financial instrument.
2. (25 pts) Compute the risk-neutral probabilities for the stock dynamics.
3. (25 pts) What is the price of the option now?
4. (25 pts) Suppose that you can sell this option for $50. How would you hedge away the risk and make profit?