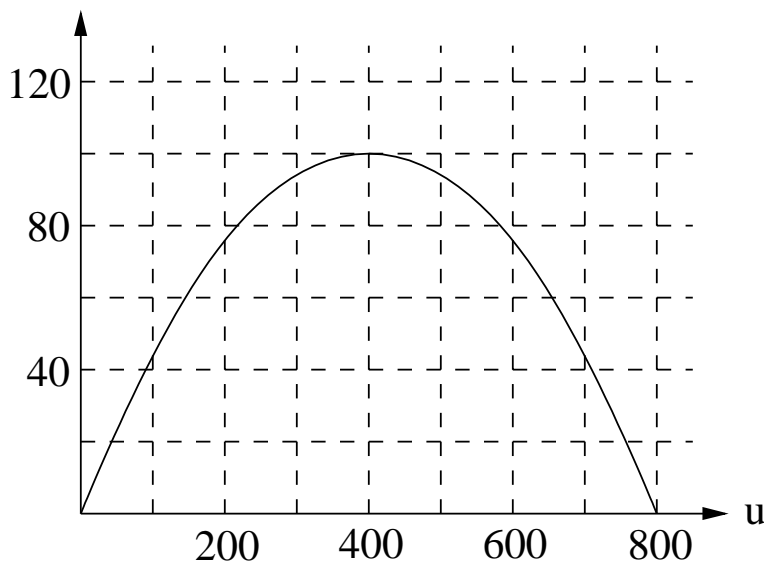


Name _____

1. The graph of the function $g = ru$, which gives the growth of a species in a year in terms of the population size, is seen in the following diagram.



- (a) Estimate the stable equilibrium population if there is a constant yearly harvest of 60.
- (b) Estimate the minimum viable population if there is a constant yearly harvest of 60.
- (c) Use this graph to estimate the maximum constant sustainable harvest and the equilibrium population size for this harvest.
- (d) Approximate the percent of the population that should be harvested each year to maximize the sustainable harvest.
- (e) Estimate the intrinsic growth rate for this population.