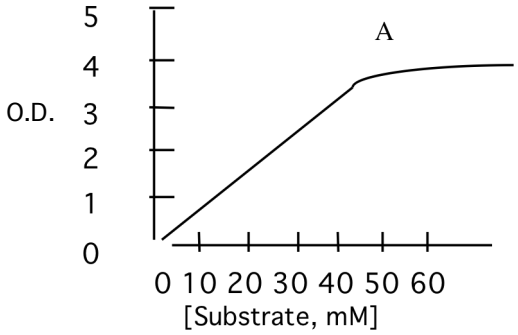
**8.** (2 pts) You are trying to determine the $K_m$ of an enzyme (under particular conditions). You collect the following data (using protocols similar to those used in lab).

**Determine the Km for the enzyme. BE SURE TO INCLUDE UNITS and show your work.**

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Increase the number of parentals to 690 to make the math easier (i.e. divide by 2,000 not 1,300).

2. (4) Three genetically linked genes are P, R and S (mutations are dominant). An individual heterozygous for all 3 loci was crossed with another individual homozygous for all three wild type traits (wild type is recessive). The following phenotypes and numbers are seen. NO particular gene order is implied in the data.

| | |
|---|---|
| $P^+R^+S$ | 200 |
| $P\ RS^+$ | 200 |
| $P^+R^+S^+$ | 100 |
| PRS | 100 |
| $P\ R^+S^+$ | 690 |
| $P^+RS$ | 690 |
| $PR^+S$ | 10 |
| $P^+RS^+$ | 10 |