

Name: _____

1. A farmer wants to enclose a rectangular area that borders a river as cheaply as possible. However, the spouse of the farmer wants the fence to look as pretty as possible. The fencing material that runs parallel to the river costs \$3 per foot, while the two other sides can be constructed for \$1 per foot. With a budget of \$200 what is the most area the farmer can enclose? Show all work and clearly label functions and equations used.