

NAME:

MATH 1512 – HW 8

Due: Tuesday Mar 7, 2023

HOMEWORK DAY 20 – *Optimization §3.7*

Note: You need to explain why the value you found is the absolute maximum or minimum.

1. §3.7: 2

2. §3.7: 9

3. Assume that if the price of a certain book is p dollars, then it will sell x copies where $x = 7000(1 - p/35)$. Suppose the dollar cost of producing those x copies is $15000 + 2.5x$. Finally, assume that the company will not sell this book for more than \$35. Determine the price for the book that will maximize profit.

4. §3.7: 10

5. §3.7: 20

HOMEWORK DAY 21 – *Optimization §3.7*

6. §3.7: 21

7. §3.7: 51

