PROBLEM OF THE WEEK #3
(Spring 2021)

According to this menu, if you want 100 chicken wings, you can save a nickel by buying two orders of 50 instead.

What are the highest and lowest possible prices for exactly 99 chicken wings?

For your convenience, the data from the menu are available in a text file at [https://people.uwplatt.edu/~swensonj/wings.txt].

WINGS

Chicken Wings	Price	Chicken Wings	Price
4 Chicken Wings	4.55	24 Chicken Wings	27.25
5 Chicken Wings	5.70	25 Chicken Wings	27.80
6 Chicken Wings	6.80	26 Chicken Wings	28.95
7 Chicken Wings	7.95	27 Chicken Wings	30.10
8 Chicken Wings	9.10	28 Chicken Wings	31.20
9 Chicken Wings	10.20	29 Chicken Wings	32.35
10 Chicken Wings	11.35	30 Chicken Wings	33.50
11 Chicken Wings	12.50	35 Chicken Wings	39.15
12 Chicken Wings	13.60	40 Chicken Wings	44.80
13 Chicken Wings	14.75	45 Chicken Wings	50.50
14 Chicken Wings	15.90	50 Chicken Wings	55.60
15 Chicken Wings	17.00	60 Chicken Wings	67.00
16 Chicken Wings	18.15	70 Chicken Wings	78.30
17 Chicken Wings	19.30	75 Chicken Wings	83.45
18 Chicken Wings	20.40	80 Chicken Wings	89.10
19 Chicken Wings	21.55	90 Chicken Wings	100.45
20 Chicken Wings	22.70	100 Chicken Wings	111.25

[Please fully explain your answer.]

Email your solution to kwonmi@uwplatt.edu by 4:00pm on Wednesday, February 17, 2021.

Every week, the best solution submitted earns a $10 Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck!

You can always see the Problem of the Week (and complete rules) online at:

http://uwpmath.weebly.com/