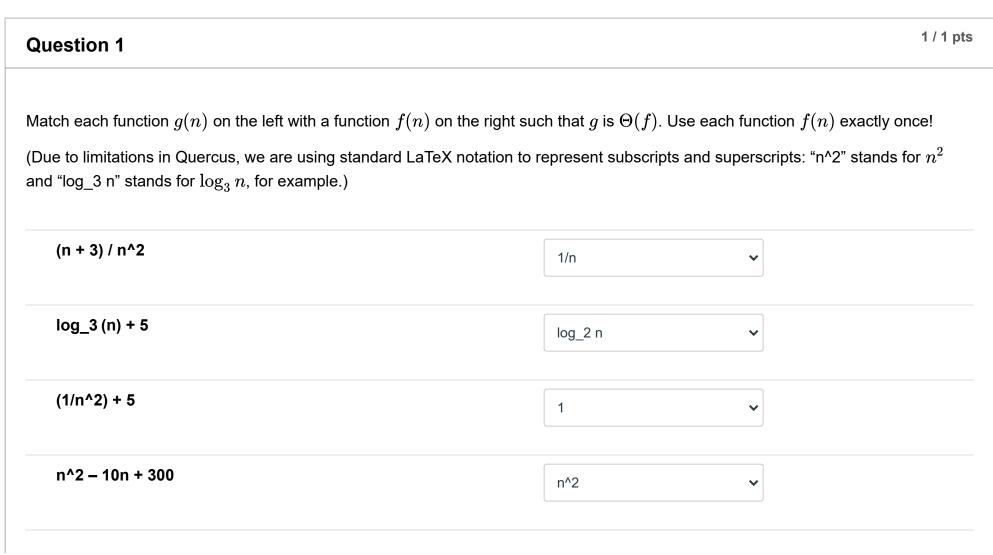
Prep 10 Quiz Results for Frederick Meneses

! Correct answers are hidden.

Score for this attempt: 6 out of 6

Submitted Mar 24 at 1pm

This attempt took less than 1 minute.



(n + 1) (n + 4) / (n + 2)	n	~	
5n + 2^n	2^n	•	

Question 2	1 / 1 pts
When analyzing the running time of an algorithm we count the number of "basic operations" performed by that algorithm. How define a basic operation?	w do we
One expression in a program (there can be many expressions in a single line of code).	
An arithmetic calculation.	
One line of code.	
Any block of code whose running time does not depend on the size of the algorithm's input.	

Question 3

Select every block of code below that constitutes a "basic operation," according to our definition. Assume that each block appears as part of a function with a list parameter named 1st and that an integer variable i has already been defined.

```
if i % 2 == 0:
       i = i + 1
    else:
      i = i * 2
print(lst[i])
    for i in range(10):
        print(lst[i])
    while i < len(lst):
       print(lst[i])
       i = i + 1
```

Question 4

Consider the following Python function.

```
def print_items(lst: list) -> None:
   for item in lst:
     print(item)
```

Question 5

Consider the following Python function.

```
def print_items2(lst: list) -> None:
    i = 0
    while i < len(lst):
    print(lst[i])
    i += 2  # Increase i by 2</pre>
```

Let *n* represent the length of the input list. How many loop iterations occur when we call this function? (We're looking for the exact expression here, so please be careful with off-by-one errors.)

```
-\lfloor \frac{n}{2} \rfloor + 1
```

 $\frac{n}{2}$

 $-\lfloor \frac{n}{2} \rfloor$

Question 6

Consider the following Python function.

```
def print_items3(lst: List[int]) -> None:
    for item in list:
        i = 0
        while i < len(lst):
            print(item + lst[i])
            i = i + 2</pre>
```

Let *n* represent the length of the input list. How many loop iterations of the *inner loop* occur when we call this function? Count **all** iterations of the inner loop, across all iterations of the outer loop.

igcirc $n\cdot \lceil rac{n}{2}
ceil$

 $n + \lfloor \frac{n}{2} \rfloor$

 $\left[\begin{array}{c} \left\lfloor \frac{n^2}{2} \right\rfloor \end{array}\right]$

Quiz Score: 6 out of 6