# MTH 337, Sample Quiz 2
## Fall 2021

You will have **15 minutes** to take the actual quiz.

1. Write a loop that will print all the positive integers less than 100 that either end in a 3 in a 7.

2. Identify and correct the error in the following code:
```
for i in range(100)
    if i % 3 == 2
        print(i)
```

3. Write a function that takes as input an integer $n$ and checks if it is a solution to the congruence

$$n^2 + 5n + 6 \equiv 0 (\mod k)$$

   for all positive integers $k < n$.

4. Reproduce the LaTeX code for

$$\sum_{k=1}^{\infty} \frac{1}{2^k} = 1$$

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