

Introduction to Finance  
Quiz 2 *October 30, 2018*

**Problems. Show all work!**

Suppose that today is February 15, 2019, and I collected the following STRIPS prices from Bloomberg:

Maturity Date	STRIPS Price
May 15, 2019	99.25
August 15, 2019	98.46
November 15, 2019	97.63
February 15, 2020	96.66
May 15, 2020	95.60
August 15, 2020	94.60
November 15, 2020	93.57
February 15, 2021	92.50
May 15, 2021	91.50
August 15, 2021	90.48
November 15, 2021	89.46
February 15, 2022	88.43
May 15, 2022	87.38
August 15, 2022	86.33
November 15, 2022	85.43
February 15, 2023	84.54

1. **(20 points)** What are the 1-year, 2-year, 3-year, and 4-year continuously-compounded spot rates on February 15, 2019? Plot these 4 on a yield curve (be sure to label the axes).

2. Consider the February 15, 2021, 8% US Treasury note.

(a) **(18 points)** What is the value of this note on February 15, 2019? (*Hint: Make a timeline.*)

(b) **(10 points)** Without doing any additional computations, what can you say about this note's yield to maturity? Explain.

(c) **(12 points)** Make a *timeline* that shows all of the cash flows you would pay and receive if you were to buy \$10,000 par value of this note on February 15, 2019, and hold the note until it matures.

3. Consider the May 15, 2020, 2.5% US Treasury note.

(a) **(18 points)** What is the value of this note on February 15, 2019? (*Hint: Make a timeline.*)

(b) **(10 points)** Without doing any additional computations, what can you say about this note's yield to maturity? Explain.

(c) **(12 points)** Make a *timeline* that shows all of the cash flows you would pay and receive if you were to buy \$5,000 par value of this note on February 15, 2019, and hold the note until it matures.