Introduction to Finance
Problem set for Quiz 2

You may assume that all three-month periods are exactly one-fourth of a year and all 6-month periods are exactly one-half of a year.

1. Today is August 15, 2021, and you observe the following STRIPS prices on Bloomberg:

Date	Maturing STRIPS Price (% of par)
November 15, 2021	98.9
February 15, 2022	97.8
May 15, 2022	96.7
August 15, 2022	95.5
November 15, 2022	94.3
February 15, 2023	93.2
May 15, 2023	91.8
August 15, 2023	90.5
November 15, 2023	89.3

   (a) What are the 3-month, 6-month, 1-year and 2-year continuously compounded spot rates?

   (b) What is the value of the following US Treasury notes:

      i. The February 15, 2023, 6% note?

      ii. The August 15, 2023, 2% note?

   (c) What can you say about the yield-to-maturity of the February 15, 2023, 6% note? Explain how you make this inference?

   (d) What can you say about the yield-to-maturity of the February 15, 2023, 2% note? Explain how you make this inference?

   (e) What is the value of the 8% November 15, 2022 note.

2. Today is May 15, 2020. You observe that the 12.5% May 15, 2022 US Treasury note has a yield to maturity of 6.2% (on a bond-equivalent basis). What is this note's value?

3. Today is November 15, 2019. You observe that the 4.5% May 15, 2021 US Treasury note has a yield to maturity of 7% (on a continuously-compounded basis). What is this note's value?