1. 3 month LIBOR was 2.16413 percent. SOFR was 5.25 percent.

2. The present value is

\[ P = \frac{15}{1.0125} + \frac{15}{1.0125^2} + \ldots + \frac{15}{1.0125^{59}} + \frac{1015}{1.0125^{60}} = 1105.09 \]

So the price is $1105.09.

3. Using the EXCEL IRR function, the annualized solution is 4.115% (or 2.0575 percent per 6 months).

4. 2¼ percent, August 15 2049.

5. (a) A plain vanilla bond.
   (b) A convertible bond, if the conversion is at the choice of the bondholder. If the conversion is at the choice of the issuer, then a plain vanilla bond. Since the question was unclear, either should be correct.

6. Here is the spread.

7. About 250 percent.