Directions: Please answer the following questions and make sure your answer are legible. If you don’t show work and/or I can’t follow it, I won’t give partial credit. You may use a calculator (not the calculator function on other technology) and the Formula Sheet that I provide you, nothing else. Good Luck.

1. Karl bought a $1,000 par value Jackie’s Bakery bond for $958.20. The coupon rate on the bond is 5.75% and the interest payments are semiannually.

(a) (1 point) Who is the issuer of this bond?
   Jackie's Bakery

(b) (1 point) Did Karl buy this at par, at a premium, or at a discount? (958.20 is below par value)
   at a discount

(c) (1 point) What is one possible reason the bond was bought at (your answer to part a)?
   You're listing something hypothetical/making up a possible reason.
   JD has a poor credit rating & things that might contribute to a low credit rating

(d) (4 points) Find the semiannual interest payment Karl will receive.

\[ I = PRT \]
\[ I =? \]
\[ P = 1000 \text{ (Par value)} \]
\[ R = 0.0575 \text{ (coupon rate)} \]
\[ T = \frac{1}{2} \]

\[ I = 1000 \times 0.0575 \times \frac{1}{2} \]
\[ I = 28.75 \]

\[ \$28.75 \text{ every 6 months} \]

(e) (4 points) What is the current yield of this bond?

\[ I = PRT \]
\[ 28.75 = 958.20 \times R \times \frac{1}{2} \]
\[ R = \frac{28.75}{958.20} \times 2 \]
\[ R = 0.06000438 \]
\[ 6.00% \]

There is a Question on the Back!
2. (4 points) The manager of a mutual fund bought a $10,000 par value zero coupon bond for $8,170. It matured 4 years later. What is the Compound Annual Growth Rate (rate of return) on this investment?

\[ i = \left( \frac{FV}{PV} \right)^{\frac{1}{n}} - 1 \]

\[ \begin{align*} FV &= 10,000 \\
PV &= 8,170 \\
n &= 4 \end{align*} \]

\[ i = \left( \frac{10,000}{8,170} \right)^{\frac{1}{4}} - 1 \]

\[ i = 0.05127 \]

\[ 5.18\% \]

**Bonus:** Refer to Question 1, suppose the credit rating of Jackie’s Bakery fell.

(a) (½ point) Would your semiannual interest payments go up, go down, or stay the same?

(b) (½ point) Would you expect to be an amount you could sell your bond for? Your answer doesn’t need to be exact, if could be of the form ‘more than xxx’ or ‘less than xxx’.

**Less than 95.4**