

- 1) A married couple from California is in the 35% Federal tax bracket and the 11% California tax bracket. They are considering a 5% Arizona municipal bond (Federal tax-free), a 4½% California bond (double tax-free) or a 7½% corporate bond (fully-taxable). Which bond offers the highest taxable-equivalent yield? (Note: We want to see at least 2 digits or even 3 digits to the right of the decimal point for yields.)

Taxable Equivalent Yield = Municipal Bond Yield / (1.0 - Federal Tax Bracket)

Double Taxable Equivalent Yield = Municipal Bond Yield / (1.0 - [Federal Tax Bracket + State Tax Bracket])

- 2) A bond with a par value (aka face value) of \$1,000 that pays 5% is currently priced at \$950. What is the nominal (aka coupon) interest rate? (Hint: What's your name, Bob?) Calculate the current yield.

Current Yield = Annual Interest / Market Price (Note: Annual interest is **Par Value * Nominal Interest Rate**)

- 3) Let's assume the bond in problem #2 is a 10-year bond. The face value (aka par value) is \$1,000, the market price is \$950, and the coupon (aka nominal) interest rate is 5%. Calculate the yield-to-maturity.

$$\text{Yield-to-Maturity} = \frac{\text{Annual Interest} + \frac{\text{Par Value} - \text{Market Price}}{\text{Number of Years to Maturity}}}{\text{Par Value} + \text{Market Price}} =$$