1. A taxpayer is considering buying a fully taxable corporate bond. The bond has a remaining maturity of 5 years promises to pay 6% interest annually (assume the coupon interest is payable annually), and has a face value of $1,000. The taxpayer faces a 31% tax rate on the interest income and requires a pretax rate of return of 6% to invest. What price is the taxpayer willing to pay for this bond?
2. The same taxpayer is also considering buying a tax-exempt municipal bond. The municipal bond has a remaining maturity of 5 years, also promises to pay 6% interest annually (again the coupon interest is payable annually), and has a face value of $1,000. Assume the corporate and municipal bonds are equally risky. At what price is the taxpayer indifferent between the corporate and municipal bond? What price is the taxpayer willing to pay for the municipal bond assuming he requires a pretax rate of return of 6% and faces a marginal tax rate of 31%? How does this tie to the discussion of implicit taxes ?