HW: Pages 324-326: 10, 14, 15, 19-27 odd, 36, 40, 45

Pages 324-326:

In Problems 7–14, find the amount that results from each investment.

10. $300 invested at 12% compounded monthly after a period of $1\frac{1}{2}$ years

14. $400 invested at 7% compounded continuously after a period of 3 years

In Problems 15–22, find the principal needed now to get each amount; that is, find the present value.

15. To get $100 after 2 years at 6% compounded monthly

19. To get $600 after 2 years at 4% compounded quarterly

21. To get $80 after $3\frac{1}{4}$ years at 9% compounded continuously

In Problems 23–26, find the effective rate of interest.

23. For 5% compounded quarterly

25. For 5% compounded continuously

In Problems 27–30, determine the rate that represents the better deal.

27. 6% compounded quarterly or $6\frac{1}{4}$% compounded annually

36. (a) How long does it take for an investment to triple in value if it is invested at 6% compounded monthly?
(b) How long does it take if the interest is compounded continuously?

40. Time Required to Reach a Goal If Angela has $100 to invest at 10% per annum compounded monthly, how long will it be before she has $175? If the compounding is continuous, how long will it be?

45. Saving for a Car Jerome will be buying a used car for $15,000 in 3 years. How much money should he ask his parents for now so that, if he invests it at 5% compounded continuously, he will have enough to buy the car?