1. An accountant deposits $15000 into an account that earns 8.5% annual interest compounded monthly. What is the value of the investment after 10 years?

2. An annuity earns 6% annual interest compounded semi-annually. What is the value of a $12000 investment in this annuity after 15 years?

3. A computer network specialist deposits $2500 into a retirement account that earns 7.5% annual interest compounded daily. What is the value of the investment after 20 years?

4. A $10000 certificate of deposit (CD) earns 5% annual interest compounded daily. What is the value of the investment after 20 years?

5. find the value in 5 years of an investment of $2500 into an account that earns 5% annual interest that is continuously compounded.

For problems 6-11 , fill in the following table for A

n	1	4	12	365	Continuous Compounding
A					

6. P = $100, r = 8%, t = 20 years

7. P = $400, r = 8%, t = 50 years

8. P = $2000, r = 9%, t = 10 years

9. P = $1500, r = 7%, t = 2 years

10. P = $5000, r = 10%, t = 40 years

11. P = $10000, r = 9.5%, t = 30 years

For problems 12-15, fill in the following table for P

N	1	4	12	365	Continuous Compounding
P					

12. A = $5000, r = 7%, t = 10 years

13. A = $100,000, r = 9%, t = 20 years

14. A = $1,000,000, r = 10.5%, t = 40 years

15. A = $2500, r = 7.5%, t = 2 years

16. How long does it take for an investment to double in value if it is invested at 8% per annum compounded monthly? Compounded continuously?

17. How long does it take for an investment to double in value if it is invested at 10% per annum compounded monthly? Compounded continuously?

18. If I have $100 to invest at 8% per annum compounded monthly, how long will it be before I have $150? If the compounding is continuous, how long will it be?

19. 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?

20. How many years will it take for an initial investment of $10,000 to grow to $25,000? Assume a rate of interest of 6% compounded continuously.

21. How many years will it take for an initial investment of $25,000 to grow to $80,000? Assume a rate of interest of 7% compounded continuously.

1. 34989.71	6.	7.	8.
2. 29127.15	466.10	18760.65	4734.73
3. 11202.50	487.54	20993.96	4870.38
4. 27180.96	492.68	21551.27	4902.71
5. 3210.06	495.22	21829.69	4918.66
	495.30	21839.26	4919.20
9.	10.	11.	12.
1717.35	226296.28	152203.13	2541.75
1723.32	259889.34	167212.90	2498.00
1724.71	268503.32	170948.62	2487.98
1725.39	272841.23	172813.73	2483.09
1725.41	272990.75	172877.82	2482.93
13.	14.	15.	16.
17843.09	18429.30	2163.33	8.7
16862.99	15830.43	2154.76	8.7
16641.28	15272.04	2152.77	
16533.56	15004.64	2151.80	
16529.89	14995.58	2151.77	
17.	18.	19.	20. 15.3
7.0	5.1	5.6	21. 16.6
6.9	5.1	5.6	