Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Certificates of Deposit

Numeric Response

1. On May 17, Shelly Jones deposited $9,813.09 in a certificate of deposit for six years that pays 3.58% interest compounded daily. Based on the information provided below, what is the annual yield for the account where she deposited money? Express your answer to the nearest hundredth of a percent.

   Interest Earned = Amount - Original Principal

   $$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
2.60%	1.006521	1.026340	1.067157	1.109596	1.168820	1.231204
2.83%	1.007100	1.028703	1.073310	1.119851	1.185060	1.254066
3.08%	1.007729	1.031278	1.080039	1.131105	1.202969	1.279398
3.33%	1.008359	1.033859	1.086809	1.142472	1.221147	1.305241
3.58%	1.008990	1.036447	1.093623	1.153953	1.239601	1.331606
3.83%	1.009621	1.039041	1.100478	1.165549	1.258333	1.358504
4.08%	1.010252	1.041641	1.107377	1.177261	1.277348	1.385944
4.33%	1.010883	1.044249	1.114319	1.189092	1.296651	1.413939
4.58%	1.010883	1.046862	1.121305	1.201041	1.316245	1.442499
4.83%	1.012147	1.049482	1.128334	1.213110	1.336135	1.471636

2. On August 5, Mark Jones deposited $9,804.13 in a certificate of deposit for three months that pays 6.09% interest compounded daily. Based on the information provided below, what is the annual yield for the account where he deposited money? Express your answer to the nearest hundredth of a percent.

   Interest Earned = Amount - Original Principal

$$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
4.13%	1.010378	1.042162	1.108762	1.179618	1.281186	1.391499
4.34%	1.010909	1.044353	1.114598	1.189567	1.297429	1.415071
4.59%	1.011540	1.046967	1.121585	1.201521	1.317035	1.443653
4.84%	1.012173	1.049587	1.128616	1.213595	1.336937	1.472813
5.09%	1.012806	1.052214	1.135691	1.225790	1.357139	1.502562
5.34%	1.013439	1.054847	1.142810	1.238108	1.377647	1.532911
5.59%	1.014072	1.057488	1.149974	1.250549	1.398464	1.563874
5.84%	1.014706	1.060134	1.157183	1.263116	1.419596	1.595461
6.09%	1.014706	1.062787	1.164437	1.275808	1.441047	1.627686
6.34%	1.015975	1.065447	1.171736	1.288628	1.462821	1.660562

3. On March 16, Dale Smith deposited $5,213.20 in a certificate of deposit for three months that pays 5.38% interest compounded daily. How much will he have in the account when it reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

   Interest Earned = Amount - Original Principal

$$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
4.38%	1.011010	1.044771	1.115713	1.191472	1.300546	1.419606
4.63%	1.011642	1.047386	1.122707	1.203445	1.320199	1.448280
4.88%	1.012274	1.050007	1.129745	1.215538	1.340149	1.477533
5.13%	1.012907	1.052635	1.136827	1.227753	1.360400	1.507377
5.38%	1.013540	1.055269	1.143953	1.240090	1.380956	1.537824
5.63%	1.014174	1.057911	1.151124	1.252552	1.401824	1.568885
5.88%	1.014807	1.060558	1.158340	1.265138	1.423006	1.600574
6.13%	1.015442	1.063212	1.165601	1.277851	1.444509	1.632902
6.38%	1.015442	1.065873	1.172908	1.290691	1.466336	1.665883
6.63%	1.016712	1.068541	1.180260	1.303660	1.488493	1.699530

4. On January 14, Dale Smith deposited $1,380.81 in a certificate of deposit for four years that pays 2.39% interest compounded daily. How much will he have in the account when it reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

   Interest Earned = Amount - Original Principal

   $$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
2.15%	1.005389	1.021732	1.055219	1.089804	1.137686	1.187672
2.39%	1.005993	1.024187	1.061569	1.100316	1.154186	1.210694
2.64%	1.006622	1.026751	1.068224	1.111373	1.171628	1.235150
2.89%	1.007251	1.029321	1.074921	1.122542	1.189334	1.260100
3.14%	1.007881	1.031897	1.081660	1.133823	1.207307	1.285553
3.39%	1.008511	1.034480	1.088441	1.145217	1.225551	1.311521
3.64%	1.009141	1.037069	1.095264	1.156725	1.244071	1.338013
3.89%	1.009772	1.039664	1.102130	1.168349	1.262871	1.365040
4.14%	1.009772	1.042267	1.109039	1.180090	1.281955	1.392612
4.39%	1.011035	1.044875	1.115992	1.191949	1.301327	1.420742

5. On July 17, Dale Jones deposited $2,184.10 in a certificate of deposit for eight years that pays 4.73% interest compounded daily. How much will he have in the account when it reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

   Interest Earned = Amount - Original Principal

   $$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
2.98%	1.007478	1.030247	1.077342	1.126590	1.195773	1.269205
3.23%	1.008107	1.032826	1.084096	1.137911	1.213843	1.294842
3.48%	1.008738	1.035411	1.090892	1.149346	1.232186	1.320997
3.73%	1.009368	1.038002	1.097731	1.160896	1.250807	1.347680
3.98%	1.009999	1.040600	1.104613	1.172562	1.269708	1.374902
4.23%	1.010631	1.043205	1.111537	1.184345	1.288895	1.402674
4.48%	1.011262	1.045816	1.118505	1.196247	1.308372	1.431007
4.73%	1.011895	1.048433	1.125517	1.208268	1.328143	1.459911
4.98%	1.011895	1.051057	1.132573	1.220410	1.348213	1.489399
5.23%	1.013160	1.053688	1.139672	1.232673	1.368585	1.519483

6. On September 9, Shelly Thompson deposited $7,851.54 in a certificate of deposit for six years that pays 3.11% interest compounded daily. How much will she have earned in interest when the certificate reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

Interest Earned = Amount - Original Principal

$$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
2.41%	1.006043	1.024392	1.062100	1.101196	1.155572	1.212633
2.61%	1.006546	1.026443	1.067423	1.110040	1.169521	1.232189
2.86%	1.007175	1.029012	1.074115	1.121196	1.187195	1.257079
3.11%	1.007805	1.031587	1.080849	1.132463	1.205136	1.282472
3.36%	1.008435	1.034169	1.087625	1.143843	1.223347	1.308377
3.61%	1.009065	1.036758	1.094443	1.155338	1.241834	1.334806
3.86%	1.009696	1.039353	1.101304	1.166948	1.260600	1.361768
4.11%	1.010327	1.041954	1.108208	1.178675	1.279649	1.389274
4.36%	1.010327	1.044562	1.115155	1.190519	1.298987	1.417336
4.61%	1.011591	1.047176	1.122146	1.202483	1.318616	1.445965

7. On August 19, Mark Smith deposited $5,325.51 in a certificate of deposit for two and a half years that pays 3.85% interest compounded daily. How much will he have earned in interest when the certificate reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

   Interest Earned = Amount - Original Principal

   $$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
3.39%	1.008511	1.034480	1.088441	1.145217	1.225551	1.311521
3.60%	1.009040	1.036654	1.094170	1.154876	1.241089	1.333738
3.85%	1.009671	1.039249	1.101029	1.166482	1.259844	1.360679
4.10%	1.010302	1.041850	1.107931	1.178204	1.278882	1.388164
4.35%	1.010934	1.044457	1.114876	1.190043	1.298208	1.416203
4.60%	1.011566	1.047071	1.121865	1.202002	1.317825	1.444809
4.85%	1.012198	1.049692	1.128898	1.214081	1.337739	1.473992
5.10%	1.012831	1.052319	1.135975	1.226281	1.357953	1.503764
5.35%	1.012831	1.054953	1.143096	1.238603	1.378473	1.534138
5.60%	1.014097	1.057593	1.150262	1.251050	1.399303	1.565125

8. On January 17, Lacy Scarpelli deposited $6,746.19 in a certificate of deposit for four years that pays 5.60% interest compounded daily. How much will she have earned in interest when the certificate reaches maturity based on the information in the table? Express your answer as a dollar amount to the nearest cent.

Interest Earned = Amount - Original Principal

$$Annual\_Yield = \frac{Interest\_for\_One\_Year}{Principal}$$

Amount per $1.00 Invested, Daily Compounding						
Annual Rate	3 Months	1 Year	2.5 Years	4 Years	6 Years	8 Years
4.60%	1.011566	1.047071	1.121865	1.202002	1.317825	1.444809
4.85%	1.012198	1.049692	1.128898	1.214081	1.337739	1.473992
5.10%	1.012831	1.052319	1.135975	1.226281	1.357953	1.503764
5.35%	1.013464	1.054953	1.143096	1.238603	1.378473	1.534138
5.60%	1.014097	1.057593	1.150262	1.251050	1.399303	1.565125
5.85%	1.014731	1.060240	1.157472	1.263621	1.420447	1.596738
6.10%	1.015366	1.062894	1.164728	1.276318	1.441911	1.628989
6.35%	1.016000	1.065554	1.172029	1.289143	1.463699	1.661891
6.60%	1.016000	1.068220	1.179376	1.302097	1.485816	1.695457
6.85%	1.017271	1.070894	1.186768	1.315181	1.508267	1.729701

Certificates of Deposit
Answer Section

NUMERIC RESPONSE

1. ANS: 3.64

   PTS: 1
2. ANS: 6.28

   PTS: 1
3. ANS: 5,283.79

   PTS: 1
4. ANS: 1,519.33

   PTS: 1
5. ANS: 3,188.59

   PTS: 1
6. ANS: 1,610.63

   PTS: 1
7. ANS: 538.03

   PTS: 1
8. ANS: 1,693.63

   PTS: 1