

LESSON I INTRODUCTION TO THE KEYBOARD

In lesson I, you will learn, by the touch method, the calculator keyboard. The touch method means that you do not look at the keys; you keep your eyes on the problem.

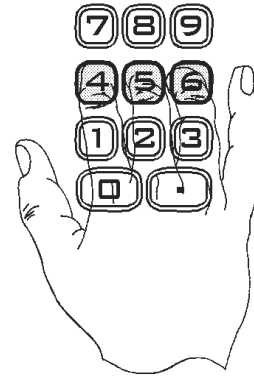
The Homerow keys 4, 5, 6

The homerow keys are located in the middle of the keyboard. The other keys are found by reaching above or below this row. The 5 key usually has a small dot in the center. This enables you to find the homerow by feel.

Use the index finger to key in 4 on the keyboard, the middle finger to key in the 5 and the ring finger to key in the 6. The little finger is used to key in the function keys. Set the decimal selector at zero to add whole numbers. **Note: If you press a wrong key, you can clear the error before pressing the + key by pressing CE on the Electronic Calculator or**

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
44+	44+
45+	45+
54+	54+
55+	55+
56+	56+
65+ *	65=

Answer 319



Practice Problems using the Homerow Keys

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
44	45	56	656	544	56
66	56	66	666	664	456
65	45	64	555	665	4665
56	64	56	444	545	44
54	46	65	654	464	665
<u>45</u>	<u>65</u>	<u>55</u>	<u>465</u>	<u>645</u>	<u>6465</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
4565	456	4544	4	666	65
4564	654	5544	45	646	56
65	644	6454	54	655	444
4545	54	4544	46	645	66
4644	455	6655	66	464	5
<u>666</u>	<u>444</u>	<u>4566</u>	<u>5</u>	<u>555</u>	<u>4666</u>

Practice Problems using the Homerow Keys

<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
44	45	56	656	544	56
66	56	66	666	664	456
65	45	64	555	665	4665
56	64	56	444	545	44
54	46	65	654	464	665
<u>45</u>	<u>65</u>	<u>55</u>	<u>465</u>	<u>645</u>	<u>6465</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
4565	456	4544	4	666	65
4564	654	5544	45	646	56
65	644	6454	54	655	444
4545	54	4544	46	645	66
4644	455	6655	66	464	5
<u>666</u>	<u>444</u>	<u>4566</u>	<u>5</u>	<u>555</u>	<u>4666</u>
<u>25.</u>	<u>26.</u>	<u>27.</u>	<u>28.</u>	<u>29.</u>	<u>30.</u>
656	6645	4455	6545	4666	6444
6654	4566	5464	5655	6444	4444
4544	4566	6666	5555	5466	5554
5556	5544	5555	6664	6555	6445
5445	5566	5544	4445	4664	4665
<u>4466</u>	<u>6654</u>	<u>4655</u>	<u>4466</u>	<u>5564</u>	<u>5556</u>
<u>31.</u>	<u>32.</u>	<u>33.</u>	<u>34.</u>	<u>35.</u>	<u>36.</u>
6654	4665	6545	4565	4646	6456
4556	4544	6545	4566	6464	4566
4656	5555	4444	6666	5454	4664
6565	5464	5454	5556	5445	5465
4456	4665	6444	5465	6465	6666
<u>4545</u>	<u>5556</u>	<u>4555</u>	<u>6444</u>	<u>4664</u>	<u>4446</u>

Practice Problems using the Homerow Key

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
54	46	44	65	56	65
46	56	54	44	56	45
45	44	54	44	54	64
44	46	44	65	55	66
46	64	54	65	56	55
<u>56</u>	<u>65</u>	<u>65</u>	<u>65</u>	<u>54</u>	<u>64</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
54	45	64	56	44	46
44	56	65	45	44	54
54	64	66	54	55	44
66	66	46	64	65	66
56	54	65	55	44	56
<u>45</u>	<u>46</u>	<u>54</u>	<u>44</u>	<u>54</u>	<u>55</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
464	465	554	565	665	465
646	555	665	656	464	666
445	465	646	456	554	555
454	444	555	666	566	566
666	566	655	544	455	466
<u>444</u>	<u>556</u>	<u>664</u>	<u>665</u>	<u>564</u>	<u>665</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
6654	4665	6545	4565	4646	6456
4556	4544	6545	4566	6464	4566
4656	5555	4444	6666	5454	4664
6565	5464	5454	5556	5445	5465
4456	4665	6444	5465	6465	6666
<u>4545</u>	<u>5556</u>	<u>4555</u>	<u>6444</u>	<u>4664</u>	<u>4446</u>
<u>25.</u>	<u>26.</u>	<u>27.</u>	<u>28.</u>	<u>29.</u>	<u>30.</u>
6656	6645	4455	6545	4666	6444
6654	4566	5464	5655	6444	4444
4544	4566	6666	5555	5466	5554
5556	5544	5555	6664	6555	6445
5445	5566	5544	4445	4664	4665
<u>4466</u>	<u>6654</u>	<u>4655</u>	<u>4466</u>	<u>5564</u>	<u>5556</u>

Use the Upper Row of keys 7, 8, 9

Use the index finger to key in the 7 on the keyboard, the middle finger to key in 8, and the ring finger to key in the 9.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
77+	77+
78+	78+
89+	89+
88+	88+
99+	99+
98+ *	98+ =

ANSWER 529



Practice Problems using the Upper Row Keys

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
77	8	97	977	779	789
88	79	79	789	897	88
99	89	98	877	887	787
78	97	89	778	999	977
89	98	77	789	987	99
79	78	89	889	989	77
<u>87</u>	<u>98</u>	<u>87</u>	<u>879</u>	<u>797</u>	<u>979</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
799	997	989	987	979	779
798	989	999	979	978	999
977	888	879	899	777	898
798	899	779	798	799	889
889	898	798	877	879	997
999	777	888	999	788	977
<u>878</u>	<u>897</u>	<u>878</u>	<u>997</u>	<u>888</u>	<u>777</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
78	97	89	778	999	977
798	899	779	798	799	889
98	87	78	888	988	889
877	988	797	989	878	787
7987	8977	9787	9978	8978	7798
79	98	89	79	778	998
<u>88</u>	<u>779</u>	<u>879</u>	<u>77</u>	<u>89</u>	<u>98</u>

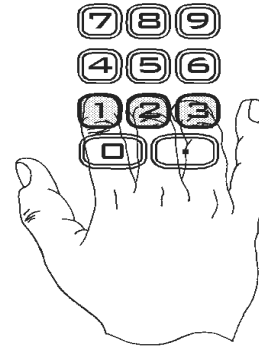
Practice Problems using the Upper and Home Row Keys

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
47	46	58	675	788	496
48	76	89	947	579	498
49	58	79	844	69	849
59	69	68	856	944	49
79	85	47	657	757	4
79	59	67	497	558	494
<u>89</u>	<u>57</u>	<u>94</u>	<u>685</u>	<u>796</u>	<u>956</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
985	589	549	494	958	976
759	957	585	858	979	966
699	588	477	744	855	966
585	954	756	859	757	459
487	985	768	747	894	479
874	785	985	589	698	487
846	946	649	749	647	945
<u>446</u>	<u>686</u>	<u>885</u>	<u>558</u>	<u>959</u>	<u>669</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
948	478	774	757	485	585
49	98	758	7	787	88
494	99	858	47	74	7785
6858	5849	5478	9758	9874	8579
9758	9756	9658	9647	7485	6969
9696	8585	7474	6776	4994	4958
499	9578	948	65	489	44
<u>4646</u>	<u>6885</u>	<u>8889</u>	<u>9998</u>	<u>9799</u>	<u>589</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
6655	5895	8789	9785	98547	58569
5469	8745	8999	9995	8585	6486
9878	9458	5689	5497	5879	5856
998	579	5867	9885	98547	65978
7558	9585	8596	9658	7458	9658
45996	6966	9965	7776	555	999
5585	9765	4778	9548	7899	9454
4888	8569	9996	7747	5585	9669
<u>6688</u>	<u>858</u>	<u>474</u>	<u>696</u>	<u>965</u>	<u>996</u>

Use the Lower Row of keys 1, 2, 3

Use the index finger to key in 1 on the keyboard, the middle finger to key in the 2, and the ring finger to enter the 3.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
11+	11+
12+	12+
22+	22+
23+	23+
33+	33+
32+ *	32+ =
ANSWER 133	



Practice Problems using the Lower Row Keys

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
12	23	323	212	232	222
22	33	111	321	312	133
23	32	231	123	311	13
32	21	123	321	213	132
33	23	132	312	131	333
23	12	311	122	321	12
22	11	322	131	223	332
<u>31</u>	<u>21</u>	<u>231</u>	<u>113</u>	<u>111</u>	<u>11</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
1113	313	1133	3232	2222	1311
1131	2231	1232	12311	2332	3131
3232	3311	3333	211	32323	1113
2231	13112	3313	2221	1231	31123
1131	1213	3222	1111	1313	2223
12331	1332	2112	12112	13121	2211
<u>2222</u>	<u>2333</u>	<u>3313</u>	<u>13112</u>	<u>2211</u>	<u>2113</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
2212	1231	3333	33333	32333	3213
1323	3213	3311	1112	2222	32112
1111	11	122	13	3	223
2121	22222	2113	3122	12111	22222
22221	1312	13	1121	2312	32111
3332	2223	2223	1123	31322	22113
<u>123</u>	<u>321</u>	<u>2113</u>	<u>2112</u>	<u>213</u>	<u>1231</u>

Practice Problems with vertical reaches using the Upper, Home, and Lower Keys

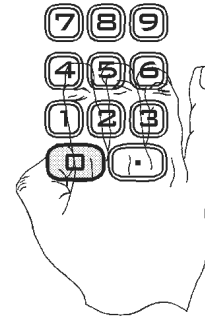
<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
719	417	172	539	529	781
481	326	239	912	685	919
418	825	936	938	725	294
117	528	934	157	258	411
181	429	522	363	552	836
482	519	339	818	339	771
139	471	582	993	396	141
<u>999</u>	<u>282</u>	<u>673</u>	<u>225</u>	<u>393</u>	<u>993</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
3939	9393	3737	7373	9379	9379
8292	9828	8229	9369	9625	85469
2288	2585	2825	8258	8525	9636
9631	9671	1739	2839	1839	9182
939	822	2797	8525	8525	8222
1779	97228	9258	5837	9191	3288
3696	3669	7131	1893	9182	2589
<u>19328</u>	<u>93228</u>	<u>88592</u>	<u>7458</u>	<u>52282</u>	<u>22582</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
9595	4949	7373	2897	7711	1717
33933	5228	125	1825	1883	1829
5469	4798	9452	5683	3228	1936
2356	4736	7828	7838	6619	3293
7528	1265	4849	6393	2479	99288
1936	663	414	448	7288	4682
7414	8258	9639	7117	2882	3939
<u>5963</u>	<u>7282</u>	<u>4212</u>	<u>1358</u>	<u>3122</u>	<u>5522</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
2211	1479	5228	1425	5261	6639
8223	1928	871	77338	91732	17171
22585	2127	1628	8411	1595	91735
2469	8852	2229	19792	5272	63172
8222	1197	7191	8997	7643	96211
22119	665	52828	29336	6382	7129
77771	21933	277	6954	2398	1973
<u>44464</u>	<u>82825</u>	<u>3917</u>	<u>3698</u>	<u>7373</u>	<u>82852</u>

Use the Zero key 0

The zero key is indexed with the right side of the thumb. Some bookkeepers and accountants key in the zero with the index finger. Calculators may be equipped with one, two, or three zero keys. The multi-zero keys are used to save time in entering items with more than one zero next to each other.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
10+	10+
20+	20+
30+	30+
40+	40+
50+	50+
60+ *	60+ =

ANSWER 210



Practice Problems using the Zero key

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
40	60	504	600	500	303
50	40	606	505	200	100
70	80	907	508	207	60
990	90	70	820	201	103
20	50	40	650	450	310
<u>60</u>	<u>50</u>	<u>405</u>	<u>802</u>	<u>508</u>	<u>404</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
004	052	089	980	066	600
085	089	093	930	820	701
505	5907	1010	3103	1080	6080
5208	2200	2080	1000	4506	7090
900	808	208	309	7100	8520
2008	4303	1001	2002	3003	4050
<u>005</u>	<u>004</u>	<u>003</u>	<u>002</u>	<u>001</u>	<u>031</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
300	200	100	600	500	400
900	800	700	740	850	960
500	500	650	640	320	120
303	202	100	101	203	300
506	606	460	680	900	800
<u>090</u>	<u>080</u>	<u>070</u>	<u>060</u>	<u>050</u>	<u>040</u>

Review of Vertical and Horizontal reaches and the Zero key

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
709	130	121	564	606	480
440	227	138	140	528	173
983	290	814	712	902	257
194	305	908	291	179	468
229	850	930	858	229	474
511	791	819	662	983	674
263	382	725	608	720	809
<u>379</u>	<u>717</u>	<u>710</u>	<u>816</u>	<u>980</u>	<u>127</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
1212	3221	51	305	2000	1230
2021	2122	310	3630	3314	404
2015	3425	405	11215	3200	52
4000	350	1040	115	50	345
125	502	145	2233	1152	10055
610	120	2150	5500	2650	3111
<u>5821</u>	<u>5680</u>	<u>9090</u>	<u>6030</u>	<u>3036</u>	<u>8520</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
6682	2179	8080	6039	22822	20
70	9336	1452	2596	4546	8225
7878	4477	5588	6699	1100	46689
86543	6600	9633	8255	4471	4664
7309	1358	79058	64624	2840	376
4049	17856	2164	478	3003	88297
19886	13420	17286	39842	37108	31994
<u>9172</u>	<u>9324</u>	<u>7982</u>	<u>7140</u>	<u>7369</u>	<u>7140</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
4662	2871	6813	428	3657	4550
703	7159	9034	2352	6238	6211
2093	1211	4375	2128	2057	9798
5862	3442	63391	58196	2738	9253
74106	80527	6748	39350	40560	68441
6841	6125	9589	3407	5987	1732
5874	3968	8345	7017	8249	7949
<u>9857</u>	<u>3498</u>	<u>8652</u>	<u>7654</u>	<u>2667</u>	<u>3764</u>

LESSON II DECIMALS IN ADDITION

In office environments your work on the calculator will commonly involve working with dollars and cents. For this reason calculators have a decimal selector setting which allows you to change the location of the decimal. The location depends on the type of numbers you are working with. There are three basic settings:

1. A fixed decimal depending on the capacity of your calculator (0, 2, 3, 4).
2. Float setting used to obtain the maximal decimal accuracy within the calculator's memory.
3. Add-mode (+) setting used when entering dollars and cents or when a problem calls for two decimal places.

The following Practice Problems for Electronic Calculators will allow you to practice the add mode setting. Set the decimal selector at add mode (+) to work the following problems.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
666+	6.66+
238+	2.38+
139+	1.39+
768+	7.68+
852+ *	8.52+ =

ANSWER 26.63
 ***Windows calculator users must remember to key the decimal.

Practice Problems

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
\$1.17	\$4.05	\$6.32	\$7.62	\$4.08	\$5.37
6.21	8.25	4.75	9.16	7.32	7.96
3.71	8.15	3.69	9.68	7.92	6.60
9.38	8.34	4.72	5.73	6.77	2.08
1.02	5.58	1.83	2.86	3.56	6.57
<u>8.00</u>	<u>3.46</u>	<u>2.14</u>	<u>9.47</u>	<u>8.67</u>	<u>9.80</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
\$4.56	\$1.23	\$7.15	\$3.03	\$4.00	\$14.66
5.40	4.88	6.11	5.11	2.50	55.31
6.60	7.89	5.07	6.25	4.60	75.66
4.65	3.39	5.82	1.23	9.19	12.21
6.65	3.33	3.89	7.77	9.08	10.55
8.00	3.46	7.65	9.48	3.03	11.77
<u>3.56</u>	<u>2.20</u>	<u>4.44</u>	<u>2.89</u>	<u>1.55</u>	<u>29.29</u>

Practice Problems using Add Mode

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
\$75.40	\$12.20	\$37.62	\$10.51	\$78.00	\$45.60
40.25	98.50	75.55	59.00	73.20	12.20
45.00	78.80	96.50	84.15	85.00	85.25
35.50	14.55	36.50	97.45	54.65	23.56
25.40	14.50	36.66	59.95	87.55	88.25
11.25	29.70	37.01	81.91	17.93	28.07
71.20	93.00	27.00	73.30	10.00	28.85
<u>69.50</u>	<u>82.25</u>	<u>42.75</u>	<u>75.50</u>	<u>20.30</u>	<u>87.95</u>

<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
\$75.50	\$20.30	\$21.55	\$54.00	\$656.30	\$73.20
92.03	59.75	468.45	9.80	29.04	3.95
15.59	77.98	32.55	118.60	612.25	443.20
131.05	9.95	.50	39.00	.07	549.65
704.15	172.25	495.00	38.50	3.50	17.75
162.50	.65	78.95	428.50	25.25	56.65
14.95	119.70	78.45	4.60	2.75	125.00
<u>168.50</u>	<u>1.75</u>	<u>80.45</u>	<u>.02</u>	<u>228.52</u>	<u>319.63</u>

<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
\$36.54	\$6.38	\$5.95	\$46.81	\$35.68	\$23.24
11.15	9.17	84.65	77.52	8.85	73.95
10.65	47.15	78.10	12.49	5.65	9.98
206.80	77.50	3.75	15.30	188.60	455.40
.35	7.65	112.05	.50	11.50	78.55
100.05	160.70	22.10	4.55	12.45	111.75
44.50	27.25	6.95	.83	11.47	59.63
<u>11.47</u>	<u>.83</u>	<u>.39</u>	<u>54.50</u>	<u>440.10</u>	<u>65.50</u>

<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
\$7.70	\$96.03	\$7.70	\$10.85	\$.45	\$455.52
20.00	275.00	4.70	.89	.95	7.25
21.01	14.45	76.39	1.25	406.11	.50
452.88	545.00	32.30	86.10	19.66	7.50
106.57	39.05	3.90	101.50	4.95	25.05
.95	7.00	201.60	22.50	88.00	80.90
162.75	296.00	27.30	33.46	22.22	.39
<u>5.44</u>	<u>504.75</u>	<u>4.58</u>	<u>2.57</u>	<u>34.60</u>	<u>74.25</u>

LESSON III ADDITION USING THE SUBTOTAL KEY AND REPEATED NUMBERS

A subtotal is a total up to a point, an interim number. In business applications, sometimes it is necessary to subtotal a series of numbers before coming to a final total. On the Computer Calculator a subtotal is shown after each entry, however on a printing calculator the subtotal key must be pressed to print the subtotal on the tape register. To obtain a subtotal press the \blacklozenge with your pinky, or thumb if you are left handed.

The repeat feature allows you to enter the last number on display or tape by simply pressing the + or - function key. This eliminates the need to re-enter the number using the number keyboard.

Electronic Calculator users set the decimal selector on add two (+) and practice the following problems using the above features.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
487273+	4872.73+
+ 354595+	4872.73+ 3545.95+
71905+	719.05+
+ \blacklozenge 235689+	719.05+ 2356.89+
110092+ *	1100.92+ =

ANSWER 18,187.32
***Windows calculator users must remember to key the decimal.

Practice Problems

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
\$45.18	\$76.86	\$92.66	\$42.19	\$19.93	\$21.21
29.16	76.86	25.26	42.19	21.71	30.30
<u>29.16</u>	<u>13.38</u>	<u>25.26</u>	<u>10.10</u>	<u>61.80</u>	<u>19.09</u>
____ s	____ s	____ s	____ s	____ s	____ s
13.67	29.29	33.30	268.88	191.67	55.50
13.67	290.29	11.80	268.88	191.67	10.82
123.73	2.03	100.80	91.09	19.00	20.28
18.10	2.03	9.93	7.92	59.33	20.28
\$ ____ T	\$ ____ T	\$ ____ T	\$ ____ T	\$ ____ T	\$ ____ T

Additional Practice Problems

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
\$12.35	\$24.76	\$3.59	\$51.00	\$10.01	\$8.68
12.35	569.87	754.53	51.00	20.06	8.68
228.82	569.87	754.53	51.00	20.06	353.73
1.16	569.87	35.00	26.97	15.00	353.73
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s
79.08	987.68	22.82	14.00	252.25	19.91
7.98	9.68	22.28	15.14	252.25	19.91
7.98	28.82	28.28	15.14	25.52	91.91
79.08	28.82	28.28	14.00	25.25	91.91
\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
\$205.00	\$5015.00	\$357.98	\$35.95	\$93.99	\$82.22
205.00	5015.00	357.98	35.59	93.39	82.82
205.05	5150.00	573.98	35.59	93.99	82.22
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s
205.50	505.00	73.98	53.95	9.39	2.82
25.55	55.55	7.39	53.95	9.39	82.82
25.55	55.55	7.39	95.59	9.39	82.82
205.50	56.55	7.93	95.59	9.93	28.28
\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
\$95.12	\$84.37	\$821.12	\$71.93	\$21.42	\$86.67
95.12	84.37	821.21	71.93	21.24	863.67
12.95	128.43	821.21	71.39	21.24	863.67
12.95	128.43	821.21	997.39	24.42	863.67
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s
995.12	128.43	121.21	9.97	24.40	86.67
9.12	128.43	12.21	9.97	24.40	86.67
9.21	128.40	12.20	9.77	24.41	8.67
\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T	\$ _____ T

LESSON IV SUBTRACTION

To determine a checking account balance or to determine how much is left after expenditures, the subtraction operation is used. These are just two common tasks accomplished using the basic math skill known as subtraction. Subtraction is determining the difference between two numbers. The main purpose of the minus key (–) is to subtract numbers or correct a number you might have entered in the machine incorrectly. Subtracting an incorrect number is accomplished by using the repeat feature you learned previously and the (–) key. When subtracting a number on the electronic display/printing calculator the (–) key will follow the number you are subtracting. On a pocket calculator the (–) sign is pressed before the number you are subtracting.

Electronic Calculator Users set the decimal selector on 0 and practice subtraction of whole numbers.

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
495 + (Minuend) 235 - * (Subtrahend)	495 - (Minuend) 235 = (Subtrahend)
ANSWER 260 435 $\underline{-235}$ 260 (Difference)	

Practice Problems

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
256 $\underline{-188}$	456 $\underline{-132}$	324 $\underline{-24}$	456 $\underline{-122}$	765 $\underline{-556}$	234 $\underline{-122}$
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
681 $\underline{-119}$	716 $\underline{-107}$	561 $\underline{-295}$	365 $\underline{-122}$	722 $\underline{-103}$	321 $\underline{-95}$
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
997 $\underline{-226}$	953 $\underline{-528}$	835 $\underline{-693}$	285 $\underline{-281}$	473 $\underline{-282}$	851 $\underline{-693}$
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
393 $\underline{-282}$	9631 $\underline{-9528}$	8532 $\underline{-5828}$	7438 $\underline{-4383}$	9155 $\underline{-8193}$	8766 $\underline{-6080}$

When the subtrahend is greater than the minuend this results in a credit balance (CR).
 A Credit balance is indicated on the tape register with the difference shown in red or a minus sign printed before the difference.

Electronic Calculator Users set the decimal selector on add mode (+) .

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
16799+ 22000- *	167.99- 220.00 =
ANSWER -52.01 ***Windows Calculator users key the decimal.	

Practice Problems

- | | | | | | |
|---------------------------|----------------------------|----------------------------|--------------------------|----------------------------|---------------------------|
| <u>1.</u> | <u>2.</u> | <u>3.</u> | <u>4.</u> | <u>5.</u> | <u>6.</u> |
| 73.85
<u>-93</u> | 66.29
<u>-67.86</u> | 3751.62
<u>-28.67</u> | 64.60
<u>-12.99</u> | 812.40
<u>-969.93</u> | 19.19
<u>-20.00</u> |
| <u>7.</u> | <u>8.</u> | <u>9.</u> | <u>10.</u> | <u>11.</u> | <u>12.</u> |
| 371.84
<u>-520.00</u> | 844.68
<u>-628.82</u> | 8.54
<u>-10.00</u> | 905.47
<u>-72.10</u> | 32.94
<u>-30.83</u> | 500.00
<u>-51.00</u> |
| <u>13.</u> | <u>14.</u> | <u>15.</u> | <u>16.</u> | <u>17.</u> | <u>18.</u> |
| 382.26
<u>-676.26</u> | 483.39
<u>-492.26</u> | 126.97
<u>-300.00</u> | 28.97
<u>-29.97</u> | 36.36
<u>-74.34</u> | 123.49
<u>-236.49</u> |
| <u>19.</u> | <u>20.</u> | <u>21.</u> | <u>22.</u> | <u>23.</u> | <u>24.</u> |
| 631.10
<u>-696.31</u> | 453.25
<u>-492.25</u> | 741.14
<u>-741.14</u> | 552.25
<u>-528.25</u> | 1793.63
<u>-1786.63</u> | 2939.34
<u>3000.00</u> |
| <u>25.</u> | <u>26.</u> | <u>27.</u> | <u>28.</u> | <u>29.</u> | <u>30.</u> |
| 200.00
<u>-205.00</u> | 1474.14
<u>-1474.14</u> | 148.96
<u>-202.22</u> | 121.21
<u>-100.00</u> | 282.82
<u>-293.36</u> | 441.14
<u>-445.85</u> |
| <u>31.</u> | <u>32.</u> | <u>33.</u> | <u>34.</u> | <u>35.</u> | <u>36.</u> |
| 1171.28
<u>-696.28</u> | 282.19
<u>-290.25</u> | 9783.28
<u>-7415.28</u> | 417.21
<u>-585.21</u> | 7983.28
<u>-97.39</u> | 114.52
<u>-185.71</u> |

Addition and Subtraction of Whole Numbers

Electronic Calculator Users set the decimal selector at zero (0) to practice the following problems.

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
475	198	705	346	950	985
-365	120	383	-226	-305	-198
190	120	792	282	147	698
-190	-693	-201	-63	-22	-96
-25	919	22	637	711	-282
609	870	-780	-256	-210	-24
702	981	609	-208	-670	989
<u>805</u>	<u>-543</u>	<u>131</u>	<u>415</u>	<u>626</u>	<u>217</u>
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
8,306	8,711	7,651	6,502	2,262	5,836
363	289	686	191	250	808
199	-825	-464	-717	6,804	4,710
-1,919	198	-500	741	-910	-2,220
55	929	990	-633	-101	-660
10	51	173	800	-101	660
-2,525	-701	-2,922	2,988	941	345
<u>-397</u>	<u>701</u>	<u>1,908</u>	<u>425</u>	<u>82</u>	<u>828</u>
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
3,855	3,086	3,826	2,771	7,056	2,741
528	619	263	963	930	169
-825	-278	-169	-373	-169	-471
969	-165	-748	528	-173	-148
-96	987	255	460	-2,702	664
179	-466	-641	-898	175	-596
6,724	9,514	5,524	4,043	5,524	6,407
<u>-552</u>	<u>-1,335</u>	<u>-3,357</u>	<u>-840</u>	<u>-283</u>	<u>-2,470</u>
<u>19.</u>	<u>20.</u>	<u>21.</u>	<u>22.</u>	<u>23.</u>	<u>24.</u>
509	6,814	7,465	2,367	8,446	591
-32	-6,031	-810	-1,905	-2,025	-512
728	266	204	204	837	710
-398	-320	-708	-610	-538	-550
-768	-708	-610	-539	-289	-937
970	860	281	179	654	383
<u>460</u>	<u>59</u>	<u>347</u>	<u>91</u>	<u>512</u>	<u>6,037</u>

Electronic Calculator Users set the decimal selector on add mode (+)

<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>	<u>6.</u>
237.65	490.74	571.29	37.95	66.69	369.96
237.65	192.92	252.00	945.73	-66.99	-369.92
128.30	-20.52	-508.08	945.73	200.85	191.91
<u>486.73</u>	<u>345.95</u>	<u>562.81</u>	<u>991.43</u>	<u>246.81</u>	<u>786.25</u>
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s.
323.32	962.59	345.02	371.11	345.76	427.85
323.32	674.89	14.17	59.36	345.76	-513.67
323.80	-674.89	164.81	16.44	22.85	297.99
<u>-761.88</u>	<u>24.06</u>	<u>738.12</u>	<u>8.88</u>	<u>508.80</u>	<u>3.93</u>
_____ T	_____ T	_____ T	_____ T	_____ T	_____ T
<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u>	<u>11.</u>	<u>12.</u>
.89	21.01	14.45	76.39	1.25	406.11
.50	36.59	7.60	545.00	32.30	86.10
-19.66	-7.50	-106.57	-39.05	3.09	101.50
<u>4.95</u>	<u>25.00</u>	<u>.95</u>	<u>.70</u>	<u>-21.60</u>	<u>-22.50</u>
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s
439.60	9.56	60.25	79.40	200.70	-.39
-6.95	9.47	35.85	-76.55	-4.99	-121.19
<u>8.87</u>	<u>406.99</u>	<u>110.45</u>	<u>8.60</u>	<u>.66</u>	<u>305.19</u>
_____ T	_____ T	_____ T	_____ T	_____ T	_____ T
<u>13.</u>	<u>14.</u>	<u>15.</u>	<u>16.</u>	<u>17.</u>	<u>18.</u>
93.15	305.06	66.35	239.15	.33	68.50
74.25	34.60	-2.57	-46.05	9.50	10.00
26.50	302.50	21.89	-6.65	.49	-1.05
24.50	-.45	.20	-12.50	-2.50	-22.50
_____ s	_____ s	_____ s	_____ s	_____ s	_____ s
-34.50	-56.75	-11.50	211.26	132.25	21.37
607.95	36.54	6.38	46.81	-35.68	23.24
<u>11.15</u>	<u>9.17</u>	<u>84.65</u>	<u>77.52</u>	<u>8.85</u>	<u>73.35</u>
_____ T	_____ T	_____ T	_____ T	_____ T	_____ T

LESSON V MULTIPLICATION

Multiplication is a very fast and simple process for achieving repeated addition. One use of multiplication in business environments is determining the final amount owed when purchasing more than one of the same product for the same cost. There are three terms that identify the parts of a multiplication problem:

1. multiplicand - the number that is multiplied by the multiplier
2. multiplier - number that indicates how many times to multiply

DECIMALS IN MULTIPLICATION

The decimal indicator (+,F,0,2,3,4) allows you to round off your answer at a fixed number of decimal places. If your calculator has a rounding switch it will provide either rounded or unrounded answers.

- a. To obtain rounded answers at a fixed number of decimal places, set the decimal indicator on (0, 2, 3, or 4,) and the rounding switch on 5/4.
- b. To obtain unrounded answers, set the decimal indicator on (F). This allows you to manually round your answers.

3. product - the result from the multiplication process

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
262 X 14 =	262 X 14 =
ANSWER 3,668	

Practice Problems

Set the decimal indicator on (0).

1. $336 \times 22 =$ _____
2. $79 \times 11 =$ _____
3. $142 \times 19 =$ _____
4. $542 \times 14 =$ _____
5. $52 \times 37 =$ _____
6. $226 \times 16 =$ _____
7. $478 \times 65 =$ _____
8. $13 \times 60 =$ _____
9. $399 \times 18 =$ _____

Set the decimal indicator on (4). **Reminder: the decimal point must be input**

1. $9.36 \times .22 =$ _____
2. $4.28 \times 43 =$ _____
3. $6.67 \times .8 =$ _____
4. $4.63 \times 1.81 =$ _____
5. $90.8 \times 6.77 =$ _____
6. $1.39 \times .22 =$ _____
7. $2.06 \times 8.29 =$ _____
8. $.017 \times 7.27 =$ _____
9. $9.91 \times 3.9 =$ _____

Set the decimal indicator on (F).

- | | | |
|----------------------------------|---------------------------------|---------------------------------|
| <u>1.</u> 3.36 × .93 = _____ | <u>2.</u> 2.95 × .3 = _____ | <u>3.</u> 4.22 × 6.18 = _____ |
| <u>4.</u> 8.48 × 1.22 = _____ | <u>5.</u> 90.8 × 62.3 = _____ | <u>6.</u> 6.25 × .88 = _____ |
| <u>7.</u> 8.93 × 7.17 = _____ | <u>8.</u> 10.2 × 26.66 = _____ | <u>9.</u> 1.10 × 71.72 = _____ |
| <u>10.</u> 12.12 × 6.21 = _____ | <u>11.</u> 75.57 × 2.01 = _____ | <u>12.</u> 8.05 × 41.66 = _____ |
| <u>13.</u> 61.62 × 14.44 = _____ | <u>14.</u> 1.18 × 9.97 = _____ | <u>15.</u> 83.1 × 17.2 = _____ |

Complete the following invoice.

Unlimited Supplies Corporation 1212 Terrace Lane San Diego, CA 92154		Invoice #15-665 April 15, 20xx	
Sold to: Automated Accounting Services 3254 El Camino Real Vista, CA 92083		Terms: Net 30 Days	
Quantity	Description	Unit Price	Total Amount
1,200	.5m pencil leads	.075	\$
2,000	Letter size envelopes-grey	.082	\$
175	Red file folders 8x11	.10	\$
150	Blue file folders 8x11	.10	\$
50	Blue ink pens	.035	\$
10	Scotch tape rolls	.33	\$
10	Felt stamp pad	1.19	\$
25	3 ½" 5 slot disk holders	.99	\$
15	500 sheets laser paper 8x11	6.67	\$
50	Black ink pens	.035	\$
5	Color Cartridge PRI-2066	32.10	\$
TOTAL AMOUNT DUE			\$

LESSON VI CONSTANT MULTIPLICATION

The constant key is used when you are multiplying several numbers by the same multiplier. (Ex: $10 \times 2 =$; $25 \times 2 =$; $32 \times 2 =$) The repeated number (known as the constant) is a number that is used two or more times in a mathematical calculation. It needs to be entered once on the electronic calculator as long as it recurs in sequence. On many calculators the constant is an automatic function of the machine and not identified by any special key. On the **Canon MP12D** calculator you enter the multiplier (constant) first, then the multiplicand. Some machines have a constant key (K) and others require you to enter the multiplicand followed by the constant first. You may want to check with your instructor or manufacturer's manual to see how your machine handles this function.

The following exercises are for Electronic Calculator Users only.

EX: $675 \times 250 = 168,750$

$654 \times 250 = 163,500$

$619 \times 250 = 154,750$

INPUT:

$250 \times 675 = 654 = 619 =$

Answer 154,750

Apply Your Skills

Set the decimal indicator at zero when using whole numbers.

1. $329 \times 129 =$ _____

$917 \times 129 =$ _____

$717 \times 129 =$ _____

$110 \times 129 =$ _____

$226 \times 129 =$ _____

4. $652 \times 225 =$ _____

$992 \times 225 =$ _____

$124 \times 225 =$ _____

$366 \times 225 =$ _____

$301 \times 225 =$ _____

2. $905 \times 125 =$ _____

$363 \times 125 =$ _____

$326 \times 125 =$ _____

$632 \times 125 =$ _____

$105 \times 125 =$ _____

5. $401 \times 191 =$ _____

$369 \times 191 =$ _____

$441 \times 191 =$ _____

$767 \times 191 =$ _____

$193 \times 191 =$ _____

3. $65 \times 14 =$

$84 \times 14 =$

$31 \times 14 =$

$91 \times 14 =$

$74 \times 14 =$

6. $42 \times 25 =$

$28 \times 25 =$

$93 \times 25 =$

$84 \times 25 =$

$10 \times 25 =$

When multiplying problems that contain decimals, count the decimal places in the multiplicand and the multiplier. Set the decimal indicator at that number. If the maximum number of decimal places are needed for your problem set the decimal indicator on the (F) float position.

The following exercises are for Electronic Calculator Users only.
Set the decimal indicator at four (4). Key in the decimal points.

- | | | |
|--------------------------------------|--------------------------------------|--------------------------------|
| 1. $3.69 \times 2.82 =$ _____ | 2. $2.34 \times 7.14 =$ _____ | 3. $2.82 \times 1.99 =$ |
| $7.89 \times 2.82 =$ _____ | $1.67 \times 7.14 =$ _____ | $9.99 \times 1.99 =$ |
| $2.02 \times 2.82 =$ _____ | $4.65 \times 7.14 =$ _____ | $1.91 \times 1.99 =$ |
| $8.05 \times 2.82 =$ _____ | $1.25 \times 7.14 =$ _____ | $4.56 \times 1.99 =$ |
| $9.87 \times 2.82 =$ _____ | $2.46 \times 7.14 =$ _____ | $7.12 \times 1.99 =$ |
| $1.28 \times 2.82 =$ _____ | $6.54 \times 7.17 =$ _____ | $1.99 \times 1.99 =$ |
|
 | | |
| 4. $2.05 \times 1.16 =$ _____ | 5. $1.81 \times 6.61 =$ _____ | 6. $2.93 \times 2.22 =$ |
| $1.18 \times 1.16 =$ _____ | $9.91 \times 6.61 =$ _____ | $7.17 \times 2.22 =$ |
| $2.22 \times 1.16 =$ _____ | $6.61 \times 6.61 =$ _____ | $8.82 \times 2.22 =$ |
| $9.31 \times 1.16 =$ _____ | $8.88 \times 6.61 =$ _____ | $7.27 \times 2.22 =$ |
| $1.16 \times 1.16 =$ _____ | $4.46 \times 6.61 =$ _____ | $4.44 \times 2.22 =$ |
| $5.52 \times 1.16 =$ _____ | $7.31 \times 6.61 =$ _____ | $2.22 \times 2.22 =$ |
|
 | | |
| 7. $5.51 \times 2.00 =$ _____ | 8. $6.61 \times 2.20 =$ _____ | 9. $4.42 \times 2.30 =$ |
| $2.00 \times 2.00 =$ _____ | $1.14 \times 2.20 =$ _____ | $2.89 \times 2.30 =$ |
| $3.96 \times 2.00 =$ _____ | $4.96 \times 2.20 =$ _____ | $8.81 \times 2.30 =$ |
| $4.42 \times 2.00 =$ _____ | $5.01 \times 2.20 =$ _____ | $1.93 \times 2.30 =$ |
| $8.00 \times 2.00 =$ _____ | $9.36 \times 2.20 =$ _____ | $3.75 \times 2.30 =$ |
| $1.91 \times 2.00 =$ _____ | $7.75 \times 2.20 =$ _____ | $6.66 \times 2.30 =$ |

LESSON VII DIVISION

Division is the process for determining the number of times one number is contained in another number. A division problem consist of three parts:

1. the dividend - number that is being divided
2. divisor - number by which to divide
3. solution - (quotient) answer to the problem

If the dividend cannot be divided equally, the amount left over is called the remainder.

Remember when working division problems set the decimal indicator for the number of decimal places desired in the solution.

Dividend	Divisor	Solution
528	÷ 4	= 132

Electronic Calculator Users INPUT:	Windows Calculator Users INPUT:
528 ÷ 4 =	528 ÷ 4 =
Answer 132	

Practice Problems

Electronic Calculator Users set the decimal indicator at zero. Remember to enter the decimal point just as it appears in the problem.

****Windows Calculator Users' answers will vary from the Answer Key because the solution will not be rounded by the decimal indicator.

- | | |
|--|--|
| <p>1. 677 ÷ 46 = _____</p> <p>3. 68.479 ÷ 9.3 = _____</p> <p>5. 26,671 ÷ 19 = _____</p> <p>7. 299 ÷ 10 = _____</p> <p>9. 13.713 ÷ 2.2 = _____</p> <p>11. 28,584 ÷ 69 = _____</p> <p>13. 5,486 ÷ 44.8 = _____</p> <p>15. 24.378 ÷ 0.69 = _____</p> | <p>2. 24,520 ÷ 26 = _____</p> <p>4. 133 ÷ 22 = _____</p> <p>6. 13.323 ÷ 5.7 = _____</p> <p>8. 19,991 ÷ 31 = _____</p> <p>10. 369 ÷ 20 = _____</p> <p>12. 17.843 ÷ 6.9 = _____</p> <p>14. 215.79 ÷ 7.3 = _____</p> <p>16. 349 ÷ 71.31 = _____</p> |
|--|--|

Electronic Calculator Users set the decimal indicator at two (2) and the round-off switch at 5/4. Two decimal places states the answer to the hundredths.

- | | |
|--|---------------------------------------|
| <u>1.</u> $49.76 \div 37 =$ _____ | <u>2.</u> $12 \div 11.12 =$ |
| <u>3.</u> $125.9 \div 70.2 =$ _____ | <u>4.</u> $11.95 \div 29 =$ |
| <u>5.</u> $18 \div 6.223 =$ _____ | <u>6.</u> $181.2 \div 19.9 =$ |
| <u>7.</u> $48.32 \div 11 =$ _____ | <u>8.</u> $10 \div 2.222 =$ |
| <u>9.</u> $715 \div 262.24 =$ _____ | <u>10.</u> $66.48 \div 18 =$ |
| <u>11.</u> $35 \div 4.696 =$ _____ | <u>12.</u> $846.9 \div 49.7 =$ |
| <u>13.</u> $79.16 \div 37 =$ _____ | <u>14.</u> $26 \div 7.168 =$ |
| <u>15.</u> $486 \div 94.3 =$ _____ | <u>16.</u> $564.9 \div 7.53 =$ |

Electronic Calculator Users set the decimal indicator at three (3). Three decimal places states the number to the thousandth place.

- | | |
|---|------------------------------------|
| <u>1.</u> $4,536 \div 11 =$ _____ | <u>2.</u> $304 \div 27 =$ |
| <u>3.</u> $129 \div 25.5 =$ _____ | <u>4.</u> $89.95 \div 24 =$ |
| <u>5.</u> $1,212 \div 2.2 =$ _____ | <u>6.</u> $321 \div 56 =$ |
| <u>7.</u> $1,299 \div 27 =$ _____ | <u>8.</u> $219 \div 108 =$ |
| <u>9.</u> $289.9 \div 23 =$ _____ | <u>10.</u> $543.8 \div 9 =$ |

Electronic Calculator Users set the decimal indicator at (F) float. The float position states the number as many places as the memory of your calculator.

- | | |
|---|--|
| <u>1.</u> $13 \div .33 =$ _____ | <u>2.</u> $73.33 \div 36.67 =$ |
| <u>3.</u> $243 \div 67 =$ _____ | <u>4.</u> $898 \div 14.88 =$ |
| <u>5.</u> $11.95 \div 4.38 =$ _____ | <u>6.</u> $125.9 \div 70.62 =$ |
| <u>7.</u> $43.4 \div .69 =$ _____ | <u>8.</u> $672.3 \div 93.75 =$ |
| <u>9.</u> $8.301 \div 7.08 =$ _____ | <u>10.</u> $49.8 \div 1.648 =$ |
| <u>11.</u> $16.89 \div .795 =$ _____ | <u>12.</u> $31.59 \div 9.468 =$ |

LESSON VIII LEARNING THE MEMORY FEATURE

The memory feature on the electronic calculator allows you to store numbers which may be recalled when needed for calculation. Four memory keys are normally found on the electronic calculator. (M+) key is used to add the total into the memory; (M-) subtracts the total from the memory; (M♦) gives you a subtotal of the memory without clearing the memory; and (M*) key gives you the grand total and clears the memory.

Often when calculating problems it is necessary to accumulate totals of several column totals. The following exercises are for Electronic Calculator Users. Key in the following problem as an example.

315	89	52	
426	393	131	
<u>+515</u>	<u>+28</u>	<u>+2319</u>	
1,256	510	2,502	<u>4,268</u> GRAND TOTAL

ELECTRONIC CALCULATOR INPUT:

315 + 89 + 52 +
 426 + 393 + 131 +
 515 + * M+ 28 + * M+ 2,319 + * M+ M*

Answer 4,268

Work the following problems using the memory function.

354	209	411	289	
465	610	525	335	
647	830	728	148	
273	428	950	562	
158	567	177	482	
492	490	335	885	
188	837	483	938	
<u>859</u>	<u>212</u>	<u>828</u>	<u>174</u>	
<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u> Grand total

438	900	678	456	
403	137	383	994	
994	916	303	245	
900	753	537	529	
850	446	710	345	
678	493	294	382	
322	628	679	191	
<u>767</u>	<u>623</u>	<u>446</u>	<u>578</u>	
<u>6.</u>	<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u> Grand total

Accumulation of Sums (Continued)

Work the following problems by using the memory keys. Add the memory subtotal key (M♦) for accumulation as you go along and the (M*) for accumulation of the grand total of the page.

Practice Problems

855	168	122	145	
47	14	12	13	
780	962	292	428	
195	168	238	192	
93	82	17	25	
11	19	92	88	
<u>356</u>	<u>137</u>	<u>894</u>	<u>395</u>	
<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u> subtotal

66	978	654	285	
710	208	471	132	
10	828	890	906	
130	20	302	13	
191	701	906	130	
<u>152</u>	<u>974</u>	<u>702</u>	<u>97</u>	
<u>6.</u>	<u>7.</u>	<u>8.</u>	<u>9.</u>	<u>10.</u> subtotal

237	985	248	975	
-62	-74	282	976	
131	-682	147	-828	
-292	-121	-431	255	
598	734	691	-100	
<u>121</u>	<u>991</u>	<u>-393</u>	<u>93</u>	
<u>11.</u>	<u>12.</u>	<u>13.</u>	<u>14.</u>	<u>15.</u> subtotal

181	939	731	168	
936	774	222	117	
-223	-822	110	-258	
-33	-57	-585	-194	
109	413	621	383	
211	-120	-252	19	
<u>99</u>	<u>637</u>	<u>71</u>	<u>220</u>	
<u>16.</u>	<u>17.</u>	<u>18.</u>	<u>19.</u>	<u>20.</u> Grand Total

Accumulation of Products

The memory keys are helpful when you have to accumulate totals of several products. An example of this function is in preparing invoices and verifying invoices. Key in the following problem as an example. Set the decimal selector at two (2).

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>EXTENSION</u>
20	Desk Calendars	\$ 2.25	<u>\$ 45.00</u>
10	Address books	1.50	<u>15.00</u>
15	Staplers	3.50	<u>53.00</u>
	TOTAL		<u>\$112.50</u>

ELECTRONIC CALCULATOR INPUT:

20×2.25 M +
 10×1.50 M +
 15×3.50 M + M*
Answer 112.50

Complete the following invoice using the memory function keys.

QUANTITY	DESCRIPTION	PRICE	EXTENSION
22	Pencil sharpener	\$ 5.25	
15	Stamp dispenser	1.00	
50	Mechanical pencil	3.50	
150	Medium pt. pens	.25	
25	MP12D calculator	29.95	
10	Drafting calculator	14.95	
35	.5mm lead refill	.415	
35	.9mm lead refill	.395	
15	Calendar refill	2.25	
20	Masking tape	.50	
10	3 Ring folder	.25	
30	Legal Pad	.50	
	TOTAL		\$

Accumulation of Quotients/Solutions

Accumulation of quotients (solutions) in the division process is similar to accumulation of products in the multiplication process. Key in the following problem as an example. Set the decimal indicator at two (2).

$$2142 \div 15 = 142.80 \quad 3230 \div 33 = 97.88 \quad 4232 \div 25 = 169.28$$

Grand Total = 409.96

ELECTRONIC CALCULATOR INPUT:

2142 \div 15 M+
3230 \div 33 M+
4232 \div 25 M+ M*
Answer 409.96

Set the decimal indicator at two (2) and work the following problems using the memory function keys.

<u>1.</u> 4167 \div 245 = _____	<u>2.</u> 4509 \div 245 = _____
3189 \div 304 = _____	1648 \div 446 = _____
1235 \div 355 = _____	3373 \div 267 = _____
5166 \div 226 = _____	2227 \div 182 = _____

Grand Total _____

Grand Total _____

<u>3.</u> 1955 \div 54 = _____	<u>4.</u> 1886 \div 818 = _____
3932 \div 18 = _____	8341 \div 211 = _____
1921 \div 47 = _____	1921 \div 111 = _____
3451 \div 32 = _____	9342 \div 673 = _____

Grand Total _____

Grand Total _____

<u>5.</u> 2.99 \div .67 = _____	<u>6.</u> 15.67 \div 1.89 = _____
8.01 \div .99 = _____	93.39 \div 8.82 = _____
3.99 \div .80 = _____	82.82 \div 9.72 = _____
7.01 \div .71 = _____	19.19 \div 3.93 = _____

Grand Total _____

Grand Total _____

<u>7.</u> 7172 \div 232 = _____	<u>8.</u> 1919 \div 838 = _____
2822 \div 991 = _____	1118 \div 919 = _____
1234 \div 466 = _____	9312 \div 991 = _____
7171 \div 821 = _____	3313 \div 937 = _____

Grand Total _____

Grand Total _____