Christopher Bragg and William Roe

1. Find the average purchase list price and sale price by state.

		ge purchase list price a ⊕ AVERAGE_LIST_PRICE	A AVERAGE SALE PRICE	
	AK	2407.27	2401	
	AL	2820.36	2813.15	
	AR	2674.36	2670	
4		2685.28	2679.56	
	CA	2640.06	2632.12	
6	CO	2566.42	2556.09	
7	CT	2667.78	2664	
8	DC	2606.52	2598.61	
9	DE	3405.51	3400	
10	FL	2698.79	2679.21	
11 (GA	2675.45	2668.2	
12	HI	2855.58	2847.08	
13	IA	3018.45	3014.05	
14	ID	2823.35	2814	
15	IL	2597.77	2591.34	
16	IN	2676.08	2668.27	
17	KS	2599.82	2589.35	
18		2727.37	2722.05	
19		2378.23	2372.06	
20]		2579.93	2575.38	
21]		2741.2	2733.17	
22]		3105.42	3092.5	
23]		2865.88	2856.27	
24]		2733.98	2722.62	
25]		2771.04	2764.88	
26]		2488.24	2480.91	
27]		2588.58	2584	
28 1		2717.78	2705.04	
29]		2309.65	2300	
30]		2658.73	2646.92	
31]		3707.75	3703.33	
32]		2820.64	2814.19	
33 j 34 j		2527.63 2223.52	2519.72	
JT .	MA	2223.52	2218.33	

35	NY	2714.15	2707.39
36	OH	2844.49	2837.61
37	OK	2412.51	2404.62
38	OR	2707.9	2703
39	PA	2700.14	2690.09
40	RI	3109.85	3105
41	SC	2463.82	2458.46
42	SD	3537.4	3530
43	TN	3084.13	3078.75
44	TX	2733.75	2726.4
45	UT	3205.41	3200.44
46	VA	2983.57	2975.54
47	WA	2742.74	2736.91
48	WI	2761.27	2753.16
49	WV	1839.47	1835
50	WY	3600.35	3597.5

- 2. Find the average purchase list price and sale price by store. Explain how this result relates to the result for #1. (Note to do this, you also need to drill down to the state level).
 - a. Stores that are in states with a high average sale price tend to have high average sales and vice versa.

♦ STOREID ♦ AVERAGE_LIST_PRICE ♦ AVERAGE_SALE_PRICE 16 127 3013.84 3008.33 17 128 3241.64 3240 18 134 2146.39 2140 19 139 4346.6 4340 20 141 1589.02 1580 21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 <th></th> <th>A CTODETO</th> <th>A AVED ACE LIST PRICE</th> <th>A AVEDACE CALE DRICE</th>		A CTODETO	A AVED ACE LIST PRICE	A AVEDACE CALE DRICE
17 128 3241.64 3240 18 134 2146.39 2140 19 139 4346.6 4340 20 141 1589.02 1580 21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.5			-	
18 134 2146.39 2140 19 139 4346.6 4340 20 141 1589.02 1580 21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 <t< th=""><th></th><td></td><td></td><td></td></t<>				
19 139 4346.6 4340 20 141 1589.02 1580 21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.4		128		
20 141 1589.02 1580 21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.				2140
21 142 2028.7 2020 22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 24		139	4346.6	4340
22 143 2305.5 2300 23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3	20	141	1589.02	1580
23 154 2018.78 2010 24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410	21	142	2028.7	2020
24 163 2654 2650 25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2	22	143	2305.5	2300
25 179 1757.12 1750 26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 <t< th=""><th>23</th><td>154</td><td>2018.78</td><td>2010</td></t<>	23	154	2018.78	2010
26 180 3461.54 3460 27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 <t< th=""><th>24</th><td>163</td><td>2654</td><td>2650</td></t<>	24	163	2654	2650
27 181 2914.48 2910 28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 <t< th=""><th>25</th><td>179</td><td>1757.12</td><td>1750</td></t<>	25	179	1757.12	1750
28 187 1971.73 1970 29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 <t< th=""><th>26</th><td>180</td><td>3461.54</td><td>3460</td></t<>	26	180	3461.54	3460
29 191 4162.41 4160 30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	27	181	2914.48	2910
30 200 1836.12 1830 31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	28	187	1971.73	1970
31 204 1738.69 1700 32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	29	191	4162.41	4160
32 205 2895.68 2890 33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	30	200	1836.12	1830
33 218 3257.16 3250 34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	31	204	1738.69	1700
34 222 2895.68 2890 35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	32	205	2895.68	2890
35 232 2340.2 2340 36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	33	218	3257.16	3250
36 234 2956.5 2950 37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	34	222	2895.68	2890
37 237 4025.54 4020 38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	35	232	2340.2	2340
38 242 2398.47 2390 39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	36	234	2956.5	2950
39 243 1846.43 1830 40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	37	237	4025.54	4020
40 246 2220.63 2164.28 41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	38	242	2398.47	2390
41 267 2410.76 2410 42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	39	243	1846.43	1830
42 268 3480.5 3480 43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	40	246	2220.63	2164.28
43 281 1978.46 1970 44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	41	267	2410.76	2410
44 283 2704.65 2700 45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	42	268	3480.5	3480
45 287 2538.19 2530 46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	43	281	1978.46	1970
46 294 2378.59 2370 47 300 2637.13 2630 48 306 2043.68 2040	44	283	2704.65	2700
47 300 2637.13 2630 48 306 2043.68 2040	45	287	2538.19	2530
48 306 2043.68 2040	46	294	2378.59	2370
	47	300	2637.13	2630
49 307 2016.22 2010	48	306	2043.68	2040
	49	307	2016.22	2010

- 3. What is the most popular paint color? What store sells the most of each paint color? What does this tell you about marketing?
 - a. Most popular paint: Hazard Flame, Most popular store: Walk-In, Marketing: Walk-In has the best marketing.

7	(null)	Mountain Green	1343
8	(null)	Grey Granite	1327
9	(null)	Fire and Smoke	1277
10	(null)	Copper Haze	1241
11	(null)	Sky Fire	1082
12	Walk-In	Hazard Flame	1033
13	Walk-In	Sea Green Fade	1030
14	Walk-In	Arctic White	994
15	Walk-In	Purple Accent	991
16	Walk-In	Morning Sun	989
17	Walk-In	Mountain Green	969
18	Walk-In	Fire and Smoke	968
19	Walk-In	Grey Granite	964
20	(null)	Wine Country	939
21	Walk-In	Copper Haze	936
22	Walk-In	Sky Fire	799
23	(null)	Neon Blue	739
24	Walk-In	Wine Country	715
25	Walk-In	Neon Blue	493
26	(null)	Black Speckle	414

- 4. What Part Manufacturers are the most popular by store? How would this influence the decisions a store owner makes?
 - a. Sedis seems to be the general most popular manufacturer for the majority of stores. This could make stores want to be located near to this manufacturer to have easy access to parts.



1 Walk-In	Sedis	108581
2 Walk-In	Shimano (USA)	45233
3 Walk-In	Specialized	20182
4 Direct Sales	Sedis	19374
5 Walk-In	Sakae	17127
6 Walk-In	Vetta	8837
7 Direct Sales	Shimano (USA)	7886
8 Walk-In	Wheelsmith	5576
9 Direct Sales	Specialized	3496
10 Direct Sales	Sakae	3218
11 Walk-In	Onza	2774
12 Walk-In	Continental	2357
13 Direct Sales	Vetta	1722
14 Direct Sales	Wheelsmith	1028
15 Direct Sales	Onza	484
16 Direct Sales	Continental	400
17 BICYCLE DOCTOR	Sedis	363
18 PERFORMANCE BICYCLE SHOP	Sedis	303
19 BUDGET PRO BICYCLES	Sedis	293
20 HELEN'S CYCLES	Sedis	283
21 SCHWINN DENNISON CYCLERY	Sedis	267
22 SPORT CHALET	Sedis	256
23 COLLINS BICYCLE SHOP	Sedis	239
24 SOMOZA'S BIKE SHOP	Sedis	239
25 HENRY'S BIKE SHOP	Sedis	237
26 TONY'S SCHWINN BIKE SHOP	Sedis	236
27 BEVERLY HILLS BIKE SHOP	Sedis	231
28 TWIN BICYCLE	Sedis	221
29 Walk-In	Ritchey	218
30 EL PEDAL DE ORO	Sedis	216
31 SAFETY CYCLE SHOP	Sedis	210
32 FLORENCE CYCLE SHOP	Sedis	210
33 BIKECOLOGY SANTA MONICA	Sedis	206
34 PALMS CYCLE	Sedis	203