

**TABLE B.3 Gasoline Mileage Performance for 32 Automobiles**

Automobile	$y$	$x_1$	$x_2$	$x_3$	$x_4$	$x_5$	$x_6$	$x_7$	$x_8$	$x_9$	$x_{10}$	$x_{11}$
Apollo	18.90	350	165	260	8.0:1	2.56:1	4	3	200.3	69.9	3910	A
Omega	17.00	350	170	275	8.5:1	2.56:1	4	3	199.6	72.9	2860	A
Nova	20.00	250	105	185	8.25:1	2.73:1	1	3	196.7	72.2	3510	A
Monarch	18.25	351	143	255	8.0:1	3.00:1	2	3	199.9	74.0	3890	A
Duster	20.07	225	95	170	8.4:1	2.76:1	1	3	194.1	71.8	3365	M
Jenson Conv.	11.2	440	215	330	8.2:1	2.88:1	4	3	184.5	69	4215	A
Skyhawk	22.12	231	110	175	8.0:1	2.56:1	2	3	179.3	65.4	3020	A
Monza	21.47	262	110	200	8.5:1	2.56:1	2	3	179.3	65.4	3180	A
Scirocco	34.70	89.7	70	81	8.2:1	3.90:1	2	4	155.7	64	1905	M
Corolla SR-5	30.40	96.9	75	83	9.0:1	4.30:1	2	5	165.2	65	2320	M
Camaro	16.50	350	155	250	8.5:1	3.08:1	4	3	195.4	74.4	3885	A
Datsun B210	36.50	85.3	80	83	8.5:1	3.89:1	2	4	160.6	62.2	2009	M
Capri II	21.50	171	109	146	8.2:1	3.22:1	2	4	170.4	66.9	2655	M
Pacer	19.70	258	110	195	8.0:1	3.08:1	1	3	171.5	77	3375	A
Babcat	20.30	140	83	109	8.4:1	3.40:1	2	4	168.8	69.4	2700	M
Granada	17.80	302	129	220	8.0:1	3.0:1	2	3	199.9	74	3890	A
Eldorado	14.39	500	190	360	8.5:1	2.73:1	4	3	224.1	79.8	5290	A
Imperial	14.89	440	215	330	8.2:1	2.71:1	4	3	231.0	79.7	5185	A
Nova LN	17.80	350	155	250	8.5:1	3.08:1	4	3	196.7	72.2	3910	A
Valiant	16.41	318	145	255	8.5:1	2.45:1	2	3	197.6	71	3660	A
Starfire	23.54	231	110	175	8.0:1	2.56:1	2	3	179.3	65.4	3050	A
Cordoba	21.47	360	180	290	8.4:1	2.45:1	2	3	214.2	76.3	4250	A
Trans AM	16.59	400	185	NA	7.6:1	3.08:1	4	3	196	73	3850	A
Corolla E-5	31.90	96.9	75	83	9.0:1	4.30:1	2	5	165.2	61.8	2275	M
Astre	29.40	140	86	NA	8.0:1	2.92:1	2	4	176.4	65.4	2150	M
Mark IV	13.27	460	223	366	8.0:1	3.00:1	4	3	228	79.8	5430	A
Celica GT	23.90	133.6	96	120	8.4:1	3.91:1	2	5	171.5	63.4	2535	M
Charger SE	19.73	318	140	255	8.5:1	2.71:1	2	3	215.3	76.3	4370	A
Cougar	13.90	351	148	243	8.0:1	3.25:1	2	3	215.5	78.5	4540	A
Elite	13.27	351	148	243	8.0:1	3.26:1	2	3	216.1	78.5	4715	A
Matador	13.77	360	195	295	8.25:1	3.15:1	4	3	209.3	77.4	4215	A
Corvette	16.50	350	165	255	8.5:1	2.73:1	4	3	185.2	69	3660	A

 $y$ : Miles/gallon $x_1$ : Displacement (cubic in.) $x_2$ : Horsepower (ft-lb) $x_3$ : Torque (ft-lb) $x_4$ : Compression ratio $x_5$ : Rear axle ratioSource: *Motor Trend*, 1975. $x_6$ : Carburetor (barrels) $x_7$ : No. of transmission speeds $x_8$ : Overall length (in.) $x_9$ : Width (in.) $x_{10}$ : Weight (lb) $x_{11}$ : Type of transmission (A automatic; M manual)