Anàlisi descriptiva univariant

Variable CityMPG

Histograma
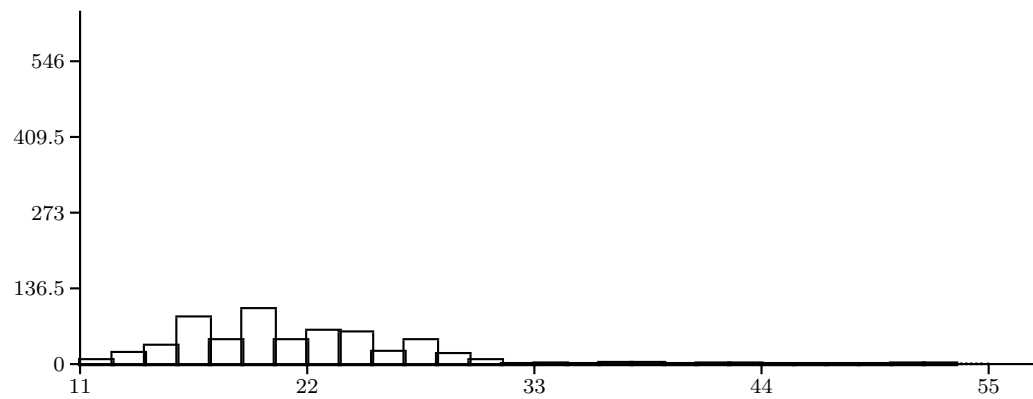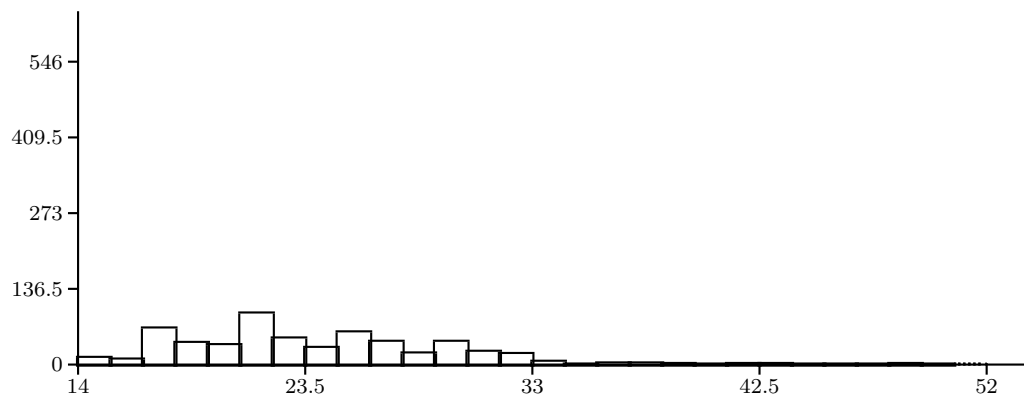

Boxplot
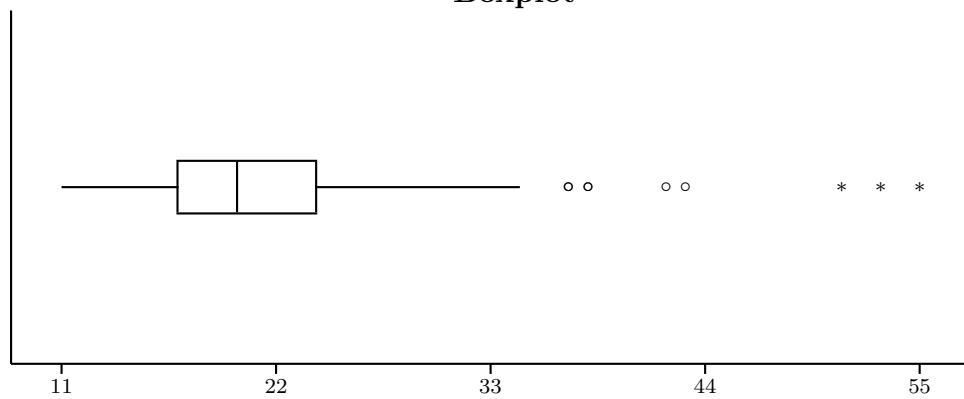
Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	21.0751
Mediana	20
Primer quartil (Q1)	17
Tercer quartil (Q3)	24
Mínim	11
Màxim	55
Quasi-desviació típica	5.334
Coeficient de variació	0.2529

Resum en 5 números

min	Q1	Me	Q3	max
11	17	20	24	55

Variable CombinedMPG

Histograma
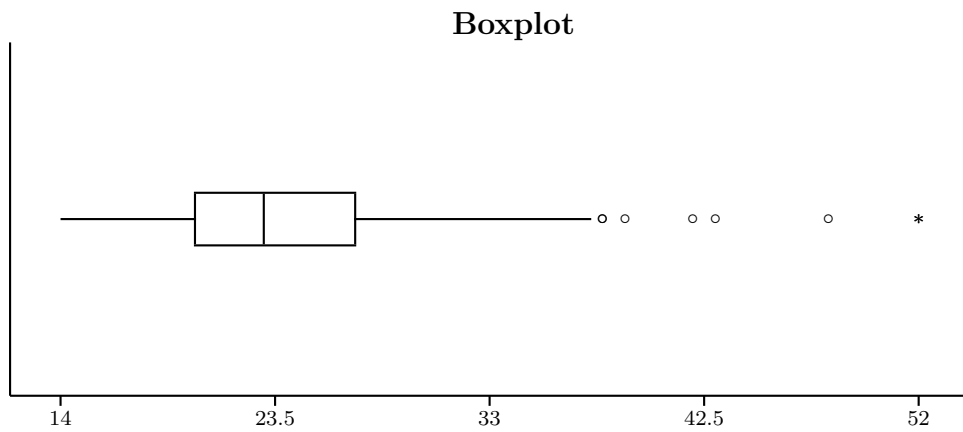
Boxplot

14	23.5	33	42.5	52

Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	23.7289
Mediana	23
Primer quartil (Q1)	20
Tercer quartil (Q3)	27
Mínim	14
Màxim	52
Quasi-desviació típica	5.2682
Coeficient de variació	0.2218

Resum en 5 números

min	Q1	Me	Q3	max
14	20	23	27	52

Variable Cylinders

Histograma
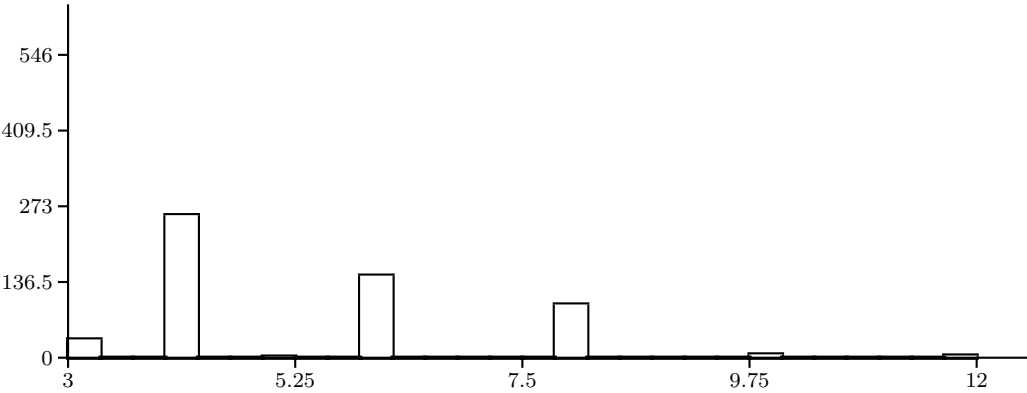
Boxplot
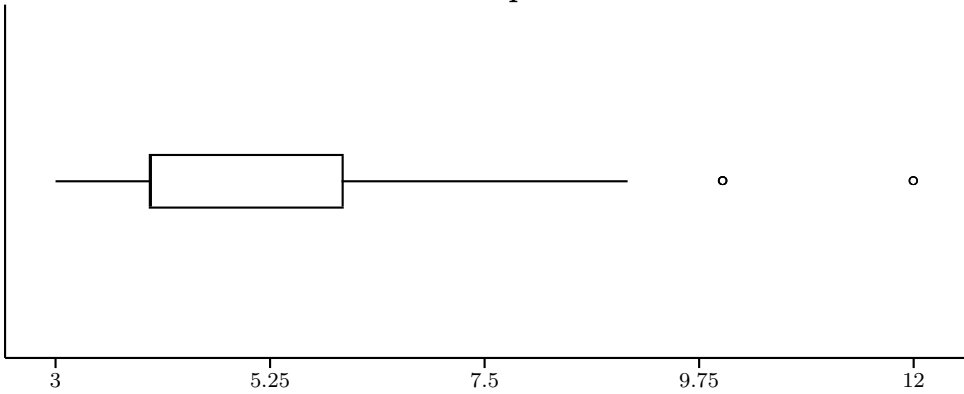
Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	5.3132
Mediana	4
Primer quartil (Q1)	4
Tercer quartil (Q3)	6
Mínim	3
Màxim	12
Quasi-desviació típica	1.7627
Coeficient de variació	0.3315

Resum en 5 números

min	Q1	Me	Q3	max
3	4	4	6	12

Variable Displacement

Histograma
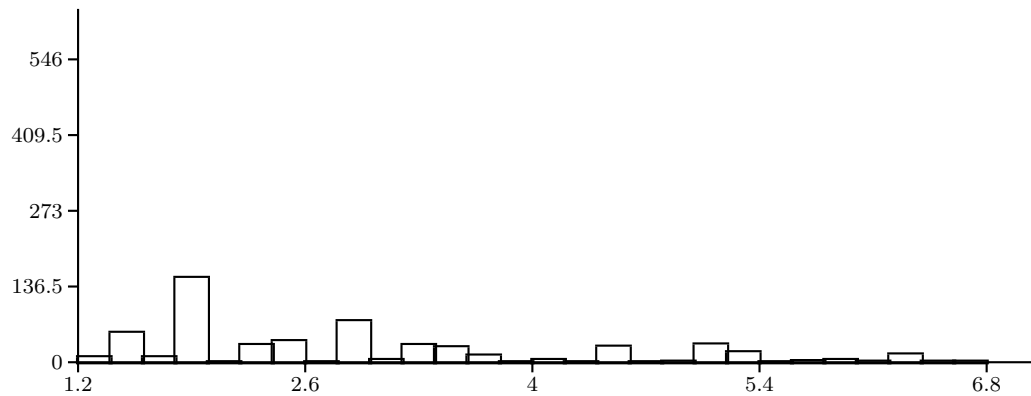
Boxplot
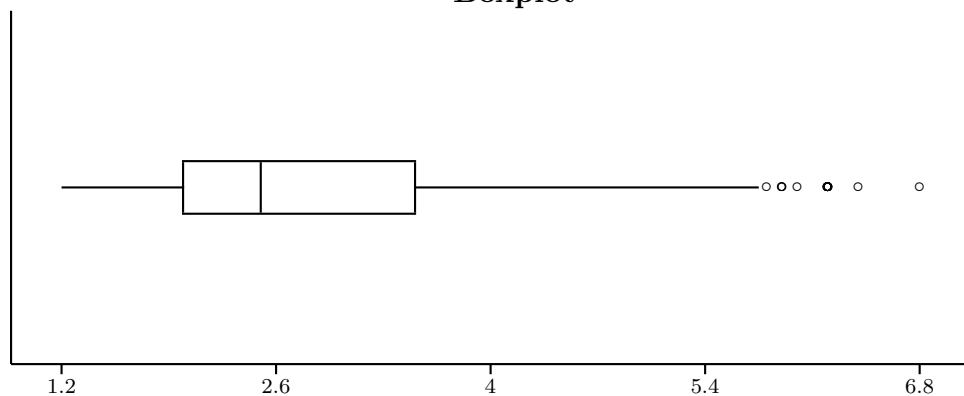
Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	2.9315
Mediana	2.5
Primer quartil (Q1)	2
Tercer quartil (Q3)	3.5
Mínim	1.2
Màxim	6.8
Quasi-desviació típica	1.2507
Coeficient de variació	0.4262

Resum en 5 números

min	Q1	Me	Q3	max
1.2	2	2.5	3.5	6.8

Variable HighwayMPG

Histograma
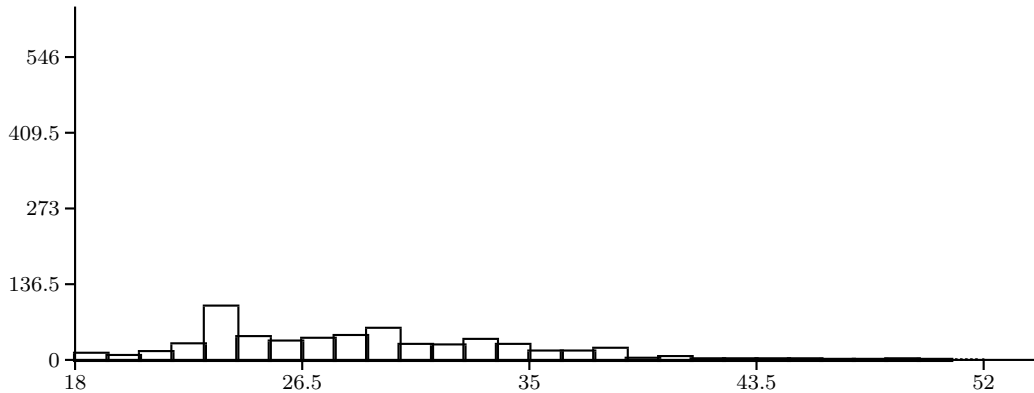
Boxplot
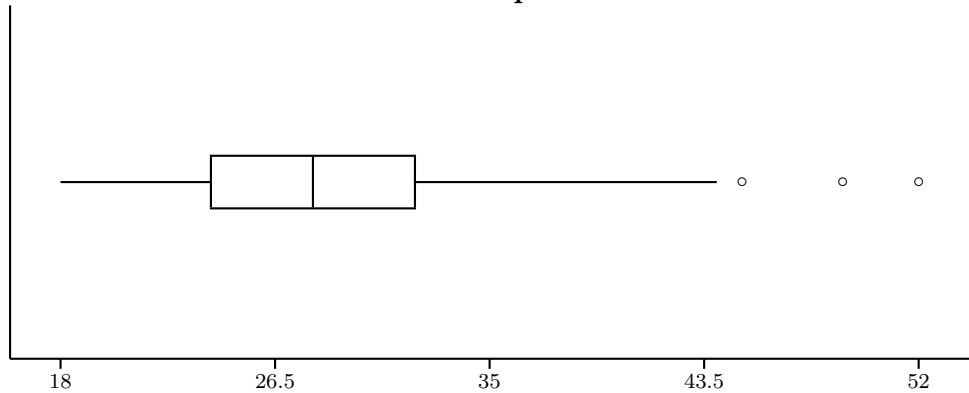
Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	28.315
Mediana	28
Primer quartil (Q1)	24
Tercer quartil (Q3)	32
Mínim	18
Màxim	52
Quasi-desviació típica	5.263
Coeficient de variació	0.1857

Resum en 5 números

min	Q1	Me	Q3	max
18	24	28	32	52

Variable Year

Histograma
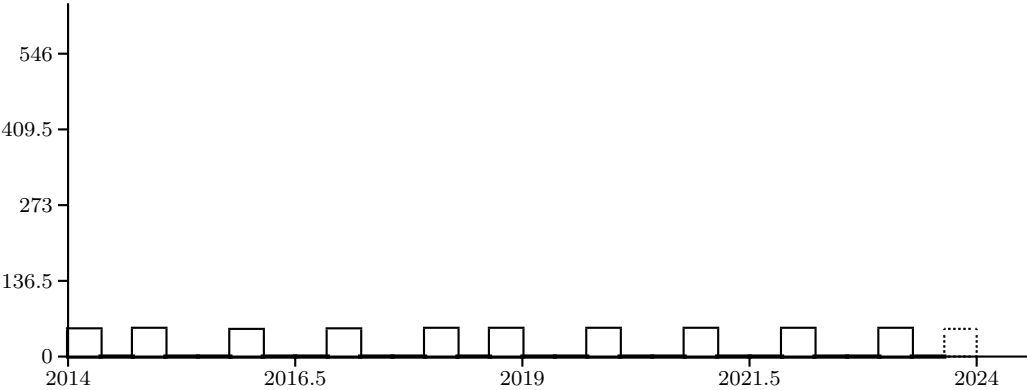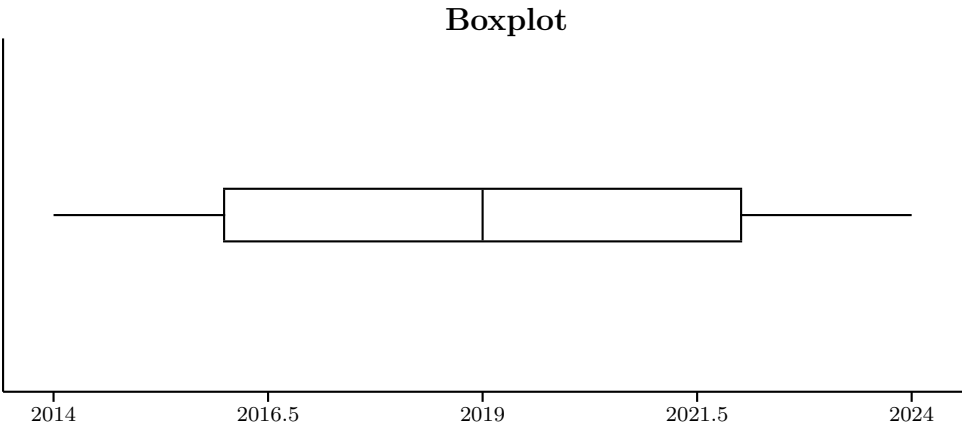
Boxplot

2014	2016.5	2019	2021.5	2024

Estadístics sumaris	
Nombre d'objectes	546
Nombre de dades mancants	0
Nombre d'observacions útils	546
Mitjana	2019.0238
Mediana	2019
Primer quartil (Q1)	2016
Tercer quartil (Q3)	2022
Mínim	2014
Màxim	2024
Quasi-desviació típica	3.1445
Coeficient de variació	0.0016

Resum en 5 números

min	Q1	Me	Q3	max
2014	2016	2019	2022	2024

Variable Class

Diagrama de barres

| 546 |
| 409.5 |
| 273 |
| 136.5 |
| 0 |

Midsize · SUV-Small · Subcompact · Large · Two-Seater · Minicompact · SUV-Standard · Compact · Wagon-Small · Pickup-Standard · Minivan · Pickup-Small · Wagon-Midsize
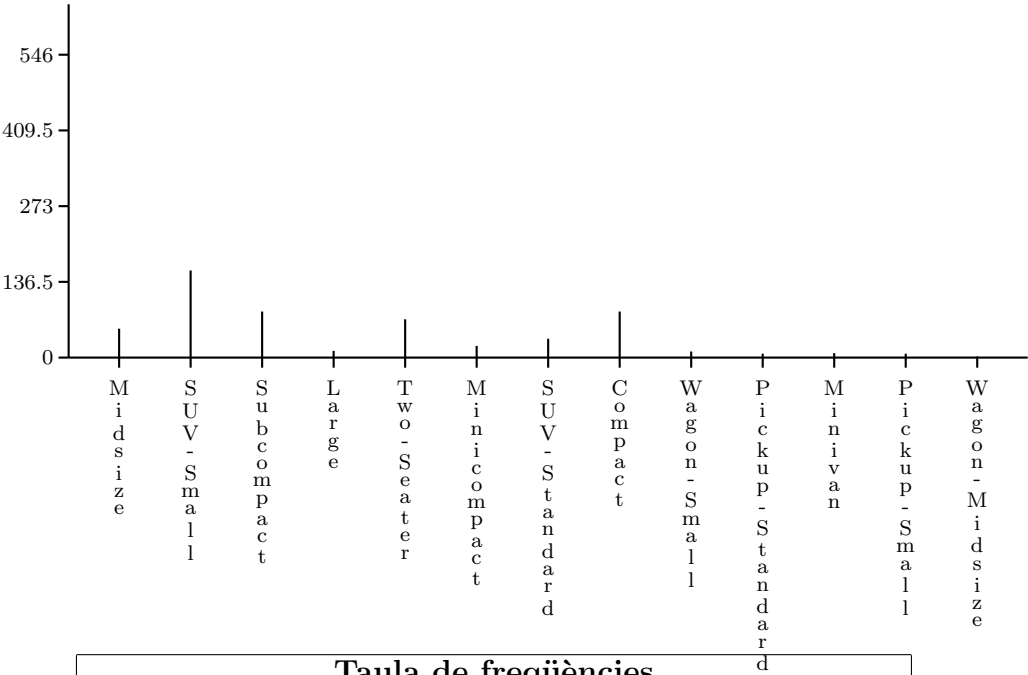
Taula de freqüències				
Modalitats	**Freq. absol.**	**Freq. acum.**	**Freq. relat.**	**Freq. rel. acum.**
Midsize	52	52	0.0952	0.0952
SUV-Small	157	209	0.2875	0.3828
Subcompact	83	292	0.152	0.5348
Large	12	304	0.022	0.5568
Two-Seater	69	373	0.1264	0.6832
Minicompact	21	394	0.0385	0.7216
SUV-Standard	34	428	0.0623	0.7839
Compact	83	511	0.152	0.9359
Wagon-Small	11	522	0.0201	0.956
Pickup-Standard	7	529	0.0128	0.9689
Minivan	8	537	0.0147	0.9835
Pickup-Small	7	544	0.0128	0.9963
Wagon-Midsize	2	546	0.0037	1
dades mancants	0	N = 546	0	

Variable Drive

Diagrama de barres
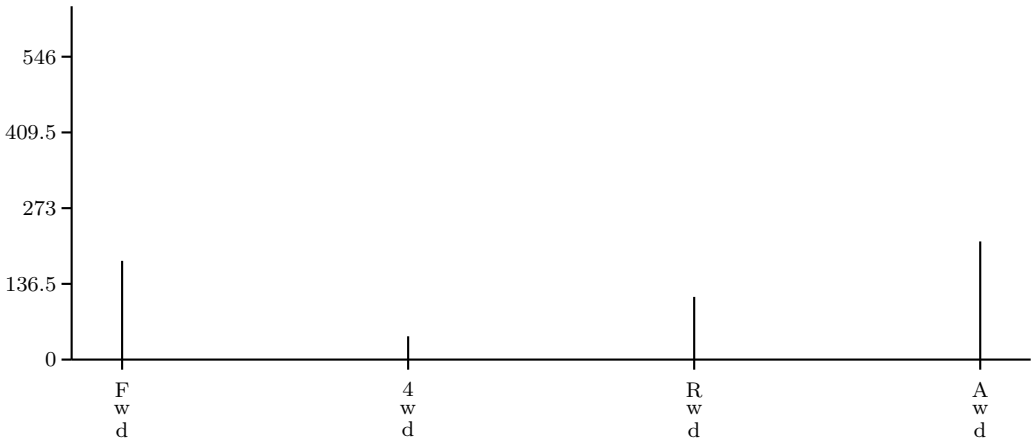
Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
Fwd	178	178	0.326	0.326
4wd	42	220	0.0769	0.4029
Rwd	113	333	0.207	0.6099
Awd	213	546	0.3901	1
dades mancants	0	N = 546	0	

Variable Brand

Diagrama de barres
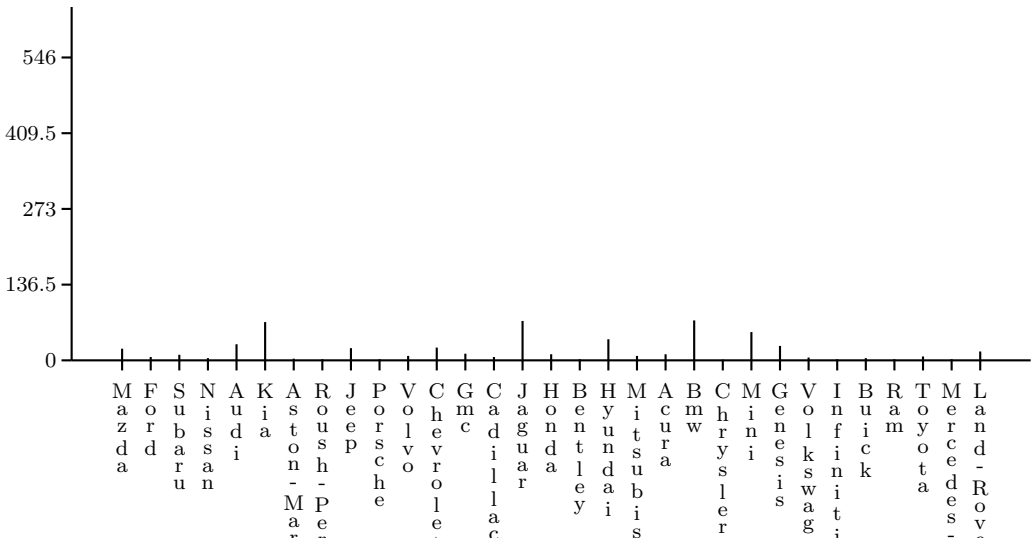
Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
Mazda	21	21	0.0385	0.0385
Ford	6	27	0.011	0.0495
Subaru	10	37	0.0183	0.0678
Nissan	4	41	0.0073	0.0751
Audi	29	70	0.0531	0.1282
Kia	69	139	0.1264	0.2546
Aston-Martin	3	142	0.0055	0.2601
Roush-Performance	2	144	0.0037	0.2637
Jeep	22	166	0.0403	0.304
Porsche	2	168	0.0037	0.3077
Volvo	8	176	0.0147	0.3223
Chevrolet	23	199	0.0421	0.3645
Gmc	12	211	0.022	0.3864
Cadillac	6	217	0.011	0.3974
Jaguar	71	288	0.13	0.5275
Honda	11	299	0.0201	0.5476
Bentley	2	301	0.0037	0.5513
Hyundai	38	339	0.0696	0.6209
Mitsubishi	8	347	0.0147	0.6355
Acura	11	358	0.0201	0.6557
Bmw	72	430	0.1319	0.7875
Chrysler	1	431	0.0018	0.7894
Mini	51	482	0.0934	0.8828
Genesis	26	508	0.0476	0.9304
Volkswagen	5	513	0.0092	0.9396
Infiniti	2	515	0.0037	0.9432
Buick	4	519	0.0073	0.9505
Ram	2	521	0.0037	0.9542
Toyota	7	528	0.0128	0.967
Mercedes-Benz	2	530	0.0037	0.9707
Land-Rover	16	546	0.0293	1
dades mancants	0	N = 546	0	

Variable Model

Diagrama de barres
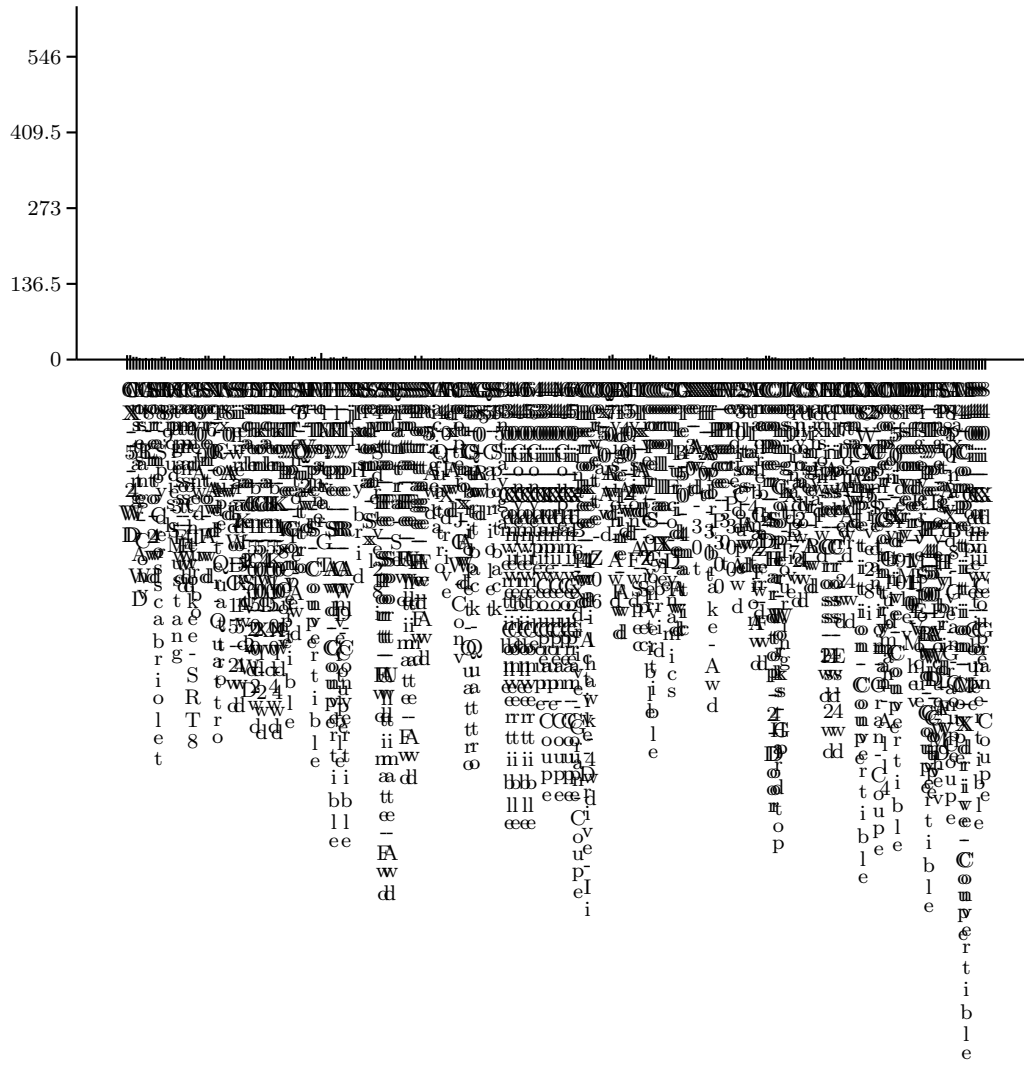
Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
6	8	8	0.0147	0.0147
CX-5-2WD	8	16	0.0147	0.0293
CX-5-4WD	5	21	0.0092	0.0385
Mustang	5	26	0.0092	0.0476
Forester-AWD	3	29	0.0055	0.0531
Mustang-Conv	1	30	0.0018	0.0549
Gt-R	3	33	0.0055	0.0604
A8-L	0	33	0	0.0604
Sorento-2wd	3	36	0.0055	0.0659
Sorento-4wd	2	38	0.0037	0.0696
Murano-Crosscabriolet	1	39	0.0018	0.0714
R8-Spyder	5	44	0.0092	0.0806
R8	5	49	0.0092	0.0897
Db9	1	50	0.0018	0.0916
Vanquish	1	51	0.0018	0.0934
Rapide-S	1	52	0.0018	0.0952
Stage-3-Mustang	2	54	0.0037	0.0989
Compass-Fwd	4	58	0.0073	0.1062
Patriot-Fwd	3	61	0.0055	0.1117
Compass-4wd	2	63	0.0037	0.1154
Patriot-4wd	2	65	0.0037	0.119
Grand-Cherokee-SRT8	1	66	0.0018	0.1209
Cayenne-Turbo	1	67	0.0018	0.1227
S60-Awd	2	69	0.0037	0.1264
K900	2	71	0.0037	0.13
Sorento-Fwd	7	78	0.0128	0.1429
Sorento-Awd	7	85	0.0128	0.1557
Xc60-Awd	1	86	0.0018	0.1575
Xc70-Awd	1	87	0.0018	0.1593
TT-Roadster-Quattro	1	88	0.0018	0.1612
Tt-Coupe-Quattro	1	89	0.0018	0.163
Wrx	7	96	0.0128	0.1758
S80-Awd	1	97	0.0018	0.1777
V60-Awd	2	99	0.0037	0.1813
Silverado-C15-2wd	1	100	0.0018	0.1832
Sierra-2WD	1	101	0.0018	0.185
Silverado-K15-4wd	1	102	0.0018	0.1868
Sierra-K15-4wd	1	103	0.0018	0.1886
Escalade-2wd	1	104	0.0018	0.1905
Escalade-ESV-2WD	1	105	0.0018	0.1923
Tahoe-C1500-2wd	1	106	0.0018	0.1941
Suburban-C1500-2wd	1	107	0.0018	0.196
Yukon-C1500-2wd	2	109	0.0037	0.1996
Yukon-C1500-Xl-2wd	2	111	0.0037	0.2033
Escalade-4wd	1	112	0.0018	0.2051
Escalade-4WD	1	113	0.0018	0.207
Tahoe-K1500-4wd	1	114	0.0018	0.2088
Suburban-K1500-4wd	1	115	0.0018	0.2106
Yukon-K1500-Xl-4wd	2	117	0.0037	0.2143
Yukon-K1500-4wd	2	119	0.0037	0.2179

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
F-Type-V8-Conv	1	120	0.0018	0.2198
F-Type-R-Coupe	1	121	0.0018	0.2216
F-Type-Convertible	6	127	0.011	0.2326
F-Type-Coupe	6	133	0.011	0.2436
Sorento-Fe-Awd	1	134	0.0018	0.2454
A7-Quattro	1	135	0.0018	0.2473
A6-Quattro	1	136	0.0018	0.2491
Hr-V-2wd	3	139	0.0055	0.2546
Hr-V-4wd	2	141	0.0037	0.2582
F-Type-S-Coupe	5	146	0.0092	0.2674
F-Type-S-Convertible	5	151	0.0092	0.2766
Mulsanne	1	152	0.0018	0.2784
Veloster	12	164	0.022	0.3004
Elantra-GT	2	166	0.0037	0.304
I-Miev	0	166	0	0.304
F-Type-S-Awd-Coupe	4	170	0.0073	0.3114
F-Type-S-Awd-Convertible	4	174	0.0073	0.3187
Ilx	1	175	0.0018	0.3205
F-Type-R-Convertible	1	176	0.0018	0.3223
F-Type-R-AWD-Coupe	5	181	0.0092	0.3315
F-Type-R-Awd-Convertible	5	186	0.0092	0.3407
Xj	1	187	0.0018	0.3425
Xjl	1	188	0.0018	0.3443
Rlx	1	189	0.0018	0.3462
Rlx-Hybrid	1	190	0.0018	0.348
Equus	1	191	0.0018	0.3498
Sedona	2	193	0.0037	0.3535
Sedona-Sx	1	194	0.0018	0.3553
Sedona-Sxl	1	195	0.0018	0.3571
Cayenne	1	196	0.0018	0.359
Z4-Sdrive28i	1	197	0.0018	0.3608
Santa-Fe-Sport-Fwd	2	199	0.0037	0.3645
Santa-Fe-Sport-Ultimate-Fwd	1	200	0.0018	0.3663
Santa-Fe-Sport-Awd	2	202	0.0037	0.37
Santa-Fe-Sport-Ultimate-Awd	1	203	0.0018	0.3718
Q7	1	204	0.0018	0.3736
Elantra-Se	1	205	0.0018	0.3755
Elantra	3	208	0.0055	0.381
Santa-Fe-Fwd	1	209	0.0018	0.3828
Santa-Fe-Ultimate-Fwd	1	210	0.0018	0.3846
Santa-Fe-Awd	1	211	0.0018	0.3864
Santa-Fe-Ultimate-Awd	1	212	0.0018	0.3883
Sportage-Fwd	7	219	0.0128	0.4011
Sportage-Fe-Fwd	1	220	0.0018	0.4029
Sportage-Awd	7	227	0.0128	0.4158
Sportage-Fe-Awd	1	228	0.0018	0.4176
Xt5	1	229	0.0018	0.4194
Xt5-Awd	1	230	0.0018	0.4212
Mirage	2	232	0.0037	0.4249
Pacifica	1	233	0.0018	0.4267

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
A4-Quattro	3	236	0.0055	0.4322
A4	1	237	0.0018	0.4341
740i-Xdrive	1	238	0.0018	0.4359
Rdx-Fwd	1	239	0.0018	0.4377
Rdx-Awd	1	240	0.0018	0.4396
Volt	1	241	0.0018	0.4414
Cooper-JCW-Conv	3	244	0.0055	0.4469
Equinox-Fwd	1	245	0.0018	0.4487
Equinox-Awd	1	246	0.0018	0.4505
A5-Cabriolet-Quattro	1	247	0.0018	0.4524
A5-Quattro	2	249	0.0037	0.456
A5-Sportback-Quattro	1	250	0.0018	0.4579
G80-Awd	2	252	0.0037	0.4615
G80-Rwd	2	254	0.0037	0.4652
Q5	1	255	0.0018	0.467
S5	1	256	0.0018	0.4689
S5-Cabriolet	1	257	0.0018	0.4707
S4	1	258	0.0018	0.4725
S5-Sportback	1	259	0.0018	0.4744
Sq5	1	260	0.0018	0.4762
Bentayga	1	261	0.0018	0.478
430i-Convertible	2	263	0.0037	0.4817
430i-Xdrive-Convertible	2	265	0.0037	0.4853
440i-Convertible	1	266	0.0018	0.4872
440i-Xdrive-Convertible	1	267	0.0018	0.489
M4-Convertible	2	269	0.0037	0.4927
640i-Convertible	1	270	0.0018	0.4945
640i-Xdrive-Convertible	1	271	0.0018	0.4963
650i-Convertible	1	272	0.0018	0.4982
650i-Xdrive-Convertible	1	273	0.0018	0.5
M6-Convertible	2	275	0.0037	0.5037
430i-Coupe	3	278	0.0055	0.5092
430i-Xdrive-Coupe	2	280	0.0037	0.5128
430i-Gran-Coupe	2	282	0.0037	0.5165
430i-Xdrive-Gran-Coupe	2	284	0.0037	0.5201
440i-Coupe	1	285	0.0018	0.522
440i-Xdrive-Coupe	2	287	0.0037	0.5256
440i-Gran-Coupe	1	288	0.0018	0.5275
440i-Xdrive-Gran-Coupe	1	289	0.0018	0.5293
M4-Coupe	3	292	0.0055	0.5348
640i-Gran-Coupe	1	293	0.0018	0.5366
640i-Xdrive-Gran-Coupe	1	294	0.0018	0.5385
650i-Gran-Coupe	1	295	0.0018	0.5403
650i-Xdrive-Gran-Coupe	1	296	0.0018	0.5421
Alpina-B6-Xdrive-Gran-Coupe	1	297	0.0018	0.544
Cherokee-Fwd	3	300	0.0055	0.5495
Cherokee-4wd	3	303	0.0055	0.5549
Cherokee-4wd-Active-Drive-Ii	2	305	0.0037	0.5586
Cherokee-Trailhawk-4wd	2	307	0.0037	0.5623
Corvette	2	309	0.0037	0.5659

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
Corvette-Z06	2	311	0.0037	0.5696
Jetta	2	313	0.0037	0.5733
Qx50	1	314	0.0018	0.5751
Qx50-Awd	1	315	0.0018	0.5769
G70-Awd	7	322	0.0128	0.5897
G70-Rwd	9	331	0.0165	0.6062
Envision-Awd	2	333	0.0037	0.6099
Ridgeline-Fwd	1	334	0.0018	0.6117
Ridgeline-Awd	1	335	0.0018	0.6136
Xc40-Awd	1	336	0.0018	0.6154
1500-2wd	1	337	0.0018	0.6172
1500-4wd	1	338	0.0018	0.619
Envision-Fwd	1	339	0.0018	0.6209
Tlx-Fwd-A-Spec	2	341	0.0037	0.6245
Tlx-Awd	1	342	0.0018	0.6264
Tlx-Awd-A-Spec	1	343	0.0018	0.6282
Corvette-Zr1	2	345	0.0037	0.6319
Cooper-Convertible	9	354	0.0165	0.6484
Cooper-S-Convertible	7	361	0.0128	0.6612
Corolla	4	365	0.0073	0.6685
Corolla-Hybrid	1	366	0.0018	0.6703
Corolla-Xse	1	367	0.0018	0.6722
Corolla-Xle	1	368	0.0018	0.674
Soul	6	374	0.011	0.685
Soul-Eco-Dynamics	2	376	0.0037	0.6886
Telluride-Fwd	1	377	0.0018	0.6905
Telluride-Awd	1	378	0.0018	0.6923
Gle350-4matic	1	379	0.0018	0.6941
Gle450-4matic	1	380	0.0018	0.696
Xe	1	381	0.0018	0.6978
Xe-30t	1	382	0.0018	0.6996
Xe-Awd	1	383	0.0018	0.7015
Xe-Awd-30t	1	384	0.0018	0.7033
Xf	1	385	0.0018	0.7051
Xf-30t	1	386	0.0018	0.707
Xf-Awd	2	388	0.0037	0.7106
Xf-Awd-30t	1	389	0.0018	0.7125
Xf-Sportbrake-Awd	2	391	0.0037	0.7161
E-Pace	2	393	0.0037	0.7198
E-Pace-P300	1	394	0.0018	0.7216
F-Pace	3	397	0.0055	0.7271
F-Pace-30t	1	398	0.0018	0.7289
Velar	1	399	0.0018	0.7308
Velar-P300	1	400	0.0018	0.7326
Evoque	1	401	0.0018	0.7344
Palisade-Awd	1	402	0.0018	0.7363
230i-Coupe	1	403	0.0018	0.7381
Seltos-Fwd	2	405	0.0037	0.7418
Seltos-Awd	4	409	0.0073	0.7491
Atlas	2	411	0.0037	0.7527

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
Atlas-4motion	1	412	0.0018	0.7546
Trailblazer-Awd	1	413	0.0018	0.7564
Encore-Gx-Fwd	1	414	0.0018	0.7582
Trailblazer-Fwd	2	416	0.0037	0.7619
Cooper-2D	7	423	0.0128	0.7747
Cooper-4D	7	430	0.0128	0.7875
Cooper-S-Hardtop-2-Door	4	434	0.0073	0.7949
Cooper-S-Hardtop-4-Door	4	438	0.0073	0.8022
John-Cooper-Works-Hardtop	2	440	0.0037	0.8059
John-Cooper-Works-Gp	1	441	0.0018	0.8077
Insight-Touring	1	442	0.0018	0.8095
Insight	1	443	0.0018	0.8114
750i-Xdrive	1	444	0.0018	0.8132
Alpina-B7	1	445	0.0018	0.815
Colorado-2wd	2	447	0.0037	0.8187
Canyon-2wd	2	449	0.0037	0.8223
Colorado-4wd	2	451	0.0037	0.826
Odyssey	2	453	0.0037	0.8297
Stinger-Awd	4	457	0.0073	0.837
Stinger-Rwd	4	461	0.0073	0.8443
Carnival	1	462	0.0018	0.8462
Mdx-Fwd	1	463	0.0018	0.848
Tucson-Fwd	1	464	0.0018	0.8498
Eclipse-Cross-2wd	1	465	0.0018	0.8517
Eclipse-Cross-Es-2wd	1	466	0.0018	0.8535
Mdx-Awd	1	467	0.0018	0.8553
Eclipse-Cross-4wd	1	468	0.0018	0.8571
Eclipse-Cross-Es-4wd	1	469	0.0018	0.859
Outlander-2wd	1	470	0.0018	0.8608
Gv70-Awd	4	474	0.0073	0.8681
Tucson-Awd	1	475	0.0018	0.87
Outlander-4wd	1	476	0.0018	0.8718
Kona-Fwd	2	478	0.0037	0.8755
Kona-Awd	2	480	0.0037	0.8791
M8-Competition-Coupe	3	483	0.0055	0.8846
M8-Competition-Convertible	3	486	0.0055	0.8901
JCW-2D	3	489	0.0055	0.8956
X2-Xdrive28i	1	490	0.0018	0.8974
X2-M35i	2	492	0.0037	0.9011
M5-Cs-Sedan	1	493	0.0018	0.9029
M8-Competition-Gran-Coupe	2	495	0.0037	0.9066
Cooper-Countryman	2	497	0.0037	0.9103
Cooper-Countryman-All4	1	498	0.0018	0.9121
Cooper-S-Clubman	1	499	0.0018	0.9139
Tucson-Hybrid	2	501	0.0037	0.9176
M850i-Xdrive-Coupe	3	504	0.0055	0.9231
M850i-Xdrive-Convertible	3	507	0.0055	0.9286
Defender-90	2	509	0.0037	0.9322
Discovery	1	510	0.0018	0.9341
Discovery-Mhev	1	511	0.0018	0.9359

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
Defender-110	2	513	0.0037	0.9396
Defender-110-Mhev	1	514	0.0018	0.9414
Defender-MHEV	1	515	0.0018	0.9432
Range-Rover-Evoque	2	517	0.0037	0.9469
Discovery-Sport	2	519	0.0037	0.9506
F-Type-P450-Rwd-Coupe	2	521	0.0037	0.9542
F-Type-P450-Rwd-Convertible	2	523	0.0037	0.9579
F-Type-P450-AWD-Coupe	2	525	0.0037	0.9615
F-Type-P450-AWD-Conv	2	527	0.0037	0.9652
Range-Rover-Evoque-Mhev	1	528	0.0018	0.967
Sportage-Hybrid-AWD	1	529	0.0018	0.9689
Sportage-Hybrid-Fwd	1	530	0.0018	0.9707
Gv80-Awd	2	532	0.0037	0.9744
M850i-Xdrive-Gran-Coupe	2	534	0.0037	0.978
Alpina-B8-Gran-Coupe	2	536	0.0037	0.9817
Trax	1	537	0.0018	0.9835
M4-Competition-Coupe	1	538	0.0018	0.9854
M4-Competition-M-Xdrive-Coupe	1	539	0.0018	0.9872
M4-Competition-M-Xdrive-Convertible	1	540	0.0018	0.989
840i-Coupe	1	541	0.0018	0.9908
840i-Xdrive-Coupe	1	542	0.0018	0.9927
840i-Convertible	1	543	0.0018	0.9945
840i-Xdrive-Convertible	1	544	0.0018	0.9963
840i-Gran-Coupe	1	545	0.0018	0.9982
840i-Xdrive-Gran-Coupe	1	546	0.0018	1
dades mancants	0	N = 546	0	

Variable Transmission

Diagrama de barres

Taula de freqüències				
Modalitats	Freq. absol.	Freq. acum.	Freq. relat.	Freq. rel. acum.
M	83	83	0.152	0.152
A	463	546	0.848	1
dades mancants	0	N = 546	0	