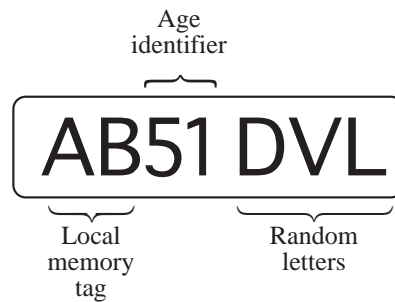


15 Vehicle Registration Marks

Vehicle registration marks are used to identify vehicles and their registered owners. The system is administered and coordinated by the Driver and Vehicle Licensing Agency (DVLA) which has local offices throughout the country.

How the current system works

A new format for vehicle registration marks was introduced in September 2001. The format has three components, as shown in the diagram below.



Local memory tag

The first two letters of the mark show the region where the vehicle was first registered. The first of these letters indicates the region and the second relates to the local DVLA office where the vehicle was registered. For example, for the registration mark shown,

'A' indicates the region Anglia (A)

'B' indicates the Peterborough office. (B).

Note that the letters 'I', 'Q' and 'Z' are *not* used in this element of the number plate.



Exercise 1

How many possible local memory tags are possible using this system?

A full list of local memory tags is given in Appendix 1.

Age identifiers

Age identifiers change twice yearly, on the first day of March and September. Two series of numbers are used for age identifiers: those issued from March to August have '0' as their first digit; those issued from September to February start with '5', so that

'51' represents vehicles first registered from September 2001 to February 2002

'02' from March 2002 to August 2002;

'52' from September 2002 to February 2003

'03' from March 2003 to August 2003,

and so on.



Exercise 2

- What is the age identifier for the period March 2005 to August 2005 ?
- During which months will the age identifier be '69' ?

The full list of age identifiers from September 2001 to August 2011 is given in Appendix 2.

Random letters

The final three letters provide a random element to ensure that each registration mark is unique. The letters 'I' and 'Q' are excluded along with letter combinations that might be considered offensive! The letter Z is acceptable in this component of the number plate.



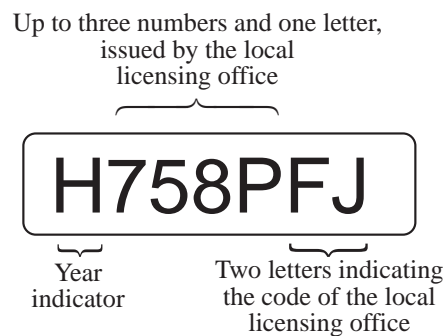
Exercise 3

Given that the letters I and Q are excluded, how many different 3-letter combinations are available?

Some 3-letter combinations that form words considered to be offensive or rude. These words are excluded from the list of available combinations.

Previous system

Registration marks allocated to vehicles registered between July 1990 and July 2001 are of the format



The *first letter* identifies the date of registration. The letter changed on 1st August each year (to correspond with the date of the Annual Motor Show).

So, for example,

- H - 1st August 1990 to 31st July 1991
- J - 1st August 1991 to 31st July 1992

(To avoid confusion, letters I, O, U and Z were not used; Q was reserved for cars of unknown age, kit cars, etc.)

The *numbers and the first letter* that follows them are the serial numbers and letters that each Vehicle Licensing Centre could use. The numbers consist of up to three integers 0 – 9, although the first integer cannot be 0; the letters are any except for I, Q and Z. The numbers 1 – 20 were retained by the DVLA for sale to customers, so the lowest number available for use by local Vehicle Licensing Centres was 21.

The *last two letters* of the registration mark identify the area code of the original registration office for the vehicle. For example, the FJ in our example identifies Exeter Vehicle Licensing Centre. Again, any letters were used except for I, Q and Z.

The list of area codes is given in Appendix 4.



Exercise 4

What was the total number of possible area codes (the last two letters)?



Exercise 5

What was the total number of vehicles that could be registered under one area code in a single year?

In fact, local Centres with many vehicles registration were allocated more than one area code (for example, Manchester used BA, BU, CB, DK, ..., etc.) in order to provide a sufficient supply of registration marks.



Exercise 6

Using this system, what is the total number of vehicles that could be registered in one year?



Activity 1

Why do you think that this system was replaced? Give evidence for your suggestions.

You might find it helpful to access the DVLA website

http://www.dvla.gov.uk/vehicles/regmarks/reg_marks.htm

Helpful extensions

The Vehicle Licensing Agency at Swansea, keeps detailed records of cars (and other vehicles) registered. A summary of recent car registrations is given below.

	<i>Year of registration (in thousands)</i>									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Petrol cars	1140	1257	1409	1589	1714	1754	1789	1863	1806	16761
Diesel cars	306	307	293	289	204	272	289	412	586	674
All vehicles	1574	1715	1871	2075	2226	2246	2312	2537	2668	2669



Activity 2

- a) Describe and illustrate the main characteristics of the data given in the previous table.
- b) Why is the sum of the first two numbers *less* than the third number in each year?

You can see from the data that we are getting close to registering 3 million vehicles a year.



Exercise 7

Under the current system, what is the theoretical maximum number of vehicles that could be registered each year?

The detailed data that is available for registration of vehicles can be used in many ways: for example, to see how long cars remain in use (how old they are); to see where cars at a particular car park come from (which will give a fairly good indication, although, of course, some vehicles will no longer be located in the area where they were first registered.)



Activity 3

Conduct a survey of number plates on cars in your area. You could, for example, survey cars in a shoppers' car park or at a local tourist attraction.

- Tasks*
- Analyse the results obtained from the data collected from the number plates and illustrate these results graphically.
 - Find out where the cars were first registered and illustrate this.
 - Repeat the survey in the same location but at different times of the year or on a weekday and then a Saturday or Sunday, to see if there are any significant differences.

Appendix 1

Local memory tags from September 2001

A	Anglia : Peterborough (AA - AN), Norwich (AO - AU), Ipswich (AV - AY)	M	Manchester : Manchester (MA - MY except MN - reserved for Isle of Man system only)
B	Birmingham : Birmingham (BA - BY)	N	North East : Newcastle (NA - NO), Stockton (NP - NY)
C	Cymru (Wales) : Cardiff (CA - CO), Swansea (CP - CV), Bangor (CW - CY)	O	Oxford : Oxford (OA - OY)
D	Deeside / Shrewsbury : Chester (DA - DK), Shrewsbury (DL - DY)	P	Preston & Peaks : Preston (PA -PT), Carlisle (PU - PY)
E	Essex : Chelmsford (EA - EY)	R	Reading : Reading (RA - RY)
F	Forest & Fens : Nottingham (FA -FP), Lincoln (FR - FY)	S	Scotland : Glasgow (A - J), Edinburgh (K - O), Dundee (P - T) Aberdeen (U - W), Inverness (X, Y)
G	Garden of England : Maidstone (GA - GO), Brighton (GP - GY)	V	Severn Valley : Worcester (VA - VY)
H	Hampshire & Dorset : Bournemouth (HA - HJ), Portsmouth (HK - HY except Isle of Wight - HW)	W	West : Bristol (WA - WN), Exeter (WO - WW), Truro (WX - WY)
K	n/a : Luton (KA - KL) Northampton (KM - KY)	Y	Yorkshire : Leeds (YA - YK), Sheffield (YL - YU), Beverley (YV - YY)
L	London : Wimbledon (LA - LJ), Stanmore (LK - LT), Sidcup (LU - LY)		X series used for EC exports, Q series for temporary imports (J, T, U spare)

City and town names show issuing Vehicle Registration Office

In the event of one office receiving an exceptionally high demand that depletes its stock of registration marks, marks may be transferred between DVLA local offices

Appendix 2

Age identifiers from September 2001 to August 2011

		<i>Age identifier</i>			<i>Age identifier</i>
September 2001	– February 2002	51	March 2002	– August 2002	02
September 2002	– February 2003	52	March 2003	– August 2003	03
September 2003	– February 2004	53	March 2004	– August 2004	04
September 2004	– February 2005	54	March 2005	– August 2005	05
September 2005	– February 2006	55	March 2006	– August 2006	06
September 2006	– February 2007	56	March 2007	– August 2007	07
September 2007	– February 2008	57	March 2008	– August 2008	08
September 2008	– February 2009	58	March 2009	– August 2009	09
September 2009	– February 2010	59	March 2010	– August 2010	10
September 2010	– February 2011	60	March 2011	– August 2011	11

Appendix 3

Age identifiers from August 1990 to August 2001

H	August 1990	-	July 1991
J	August 1991	-	July 1992
K	August 1992	-	July 1993
L	August 1993	-	July 1994
M	August 1994	-	July 1995
N	August 1995	-	July 1996
P	August 1996	-	July 1997
R	August 1997	-	July 1998
S	August 1998	-	February 1999
T	March 1999	-	July 1999
V	August 1999	-	February 2000
W	March 2000	-	July 2000
X	August 2000	-	February 2001
Y	March 2001	-	August 2001

Appendix 4 Area codes from 1974 – August 2001

AA	Bournemouth	DS	Glasgow	HJ	Chelmsford	MA	Chester	PR	Bournemouth	UH	Cardiff
AB	Worcester	DT	Sheffield	HK	Chelmsford	MB	Chester	PS	Aberdeen	UJ	Shrewsbury
AC	Coventry	DU	Coventry	HL	Sheffield	MC	London NE	PT	Newcastle	UK	Birmingham
AD	Gloucester	DV	Exeter	HM	London (Central)			PU	Chelmsford	UL	London (Central)
AE	Bristol	DW	Cardiff	HN	Middlesbrough	MD	London NE	PV	Ipswich	UM	Leeds
AF	Truro	DX	Ipswich	HO	Bournemouth	ME	London NE	PW	Norwich	UN	Exeter
AG	Hull	DY	Brighton	HP	Coventry	MF	London NE	PX	Portsmouth	UO	Exeter
AH	Norwich			HR	Swindon	MG	London NE	PY	Middlesbrough	UP	Newcastle
AJ	Middlesbrough	EA	Dudley	HS	Glasgow	MH	London NE	RA	Nottingham	UR	Luton
AK	Sheffield	EB	Peterborough	HT	Bristol	MJ	Luton	RB	Nottingham	US	Glasgow
AL	Nottingham	EC	Preston	HU	Bristol	MK	London NE	RC	Nottingham	UT	Leicester
AM	Swindon	ED	Liverpool	HV	London (Central)	ML	London NE	RD	Reading	UU	London (Central)
AN	Reading	EE	Lincoln	HW	Bristol	MM	London NE	RE	Stoke-on-Trent	UV	London (Central)
AO	Carlisle	EF	Middlesbrough	HX	London (Central)	MN	(not used)	RF	Stoke-on-Trent	UW	London (Central)
AP	Brighton	EG	Peterborough	HY	Bristol	MO	Reading	RG	Newcastle	UX	Shrewsbury
AR	Chelmsford	EJ	Stoke-on-Trent	JA	Manchester	MP	London NE	RH	Hull	UY	Worcester
AS	Inverness	EK	Haverfordwest	JB	Reading	MR	Swindon	RJ	Manchester	VA	Peterborough
AT	Hull	EL	Bournemouth	JC	Bangor	MS	Edinburgh	RK	London NW	VB	Maidstone
AU	Nottingham	EJ	Liverpool	JD	London (Central)	MT	London NE	RL	Truro	VC	Coventry
AV	Peterborough	EM	Liverpool	JE	Peterborough	MU	London NE	RM	Carlisle	VD	series withdrawn
AW	Shrewsbury	EN	Manchester	JF	Leicester	MV	London SE	RN	Preston	VE	Peterborough
AX	Cardiff	EO	Preston	JG	Maidstone	MW	Swindon	RO	Luton	VF	Norwich
AY	Leicester	EP	Swansea	JH	Reading	MX	London SE	RP	Northampton	VG	Norwich
BA	Manchester	ER	Peterborough	JJ	Maidstone	MY	London SE	RR	Nottingham	VH	Huddersfield
BB	Newcastle	ES	Dundee	JK	Brighton	NA	Manchester	RS	Aberdeen	VJ	Gloucester
BC	Leicester	EU	Sheffield	JL	Lincoln	NB	Manchester	RT	Ipswich	VK	Newcastle
BD	Northampton	EV	Chelmsford	JM	Reading	NC	Manchester	RU	Bournemouth	VL	Lincoln
BE	Lincoln	EW	Peterborough	JN	Chelmsford	ND	Manchester	RV	Portsmouth	VM	Manchester
BF	Stoke-on-Trent	EX	Norwich	JO	Oxford	NE	Manchester	RW	Coventry	VN	Middlesbrough
BG	Liverpool	EY	Bangor	JP	Liverpool	NF	Manchester	RX	Reading	VO	Nottingham
BH	Luton			JR	Newcastle	NG	Norwich	RY	Leicester	VP	Birmingham
BJ	Ipswich	FA	Stoke-on-Trent	JS	Inverness	NH	Northampton	SA	Aberdeen	VR	Manchester
BK	Portsmouth	FB	Bristol	JT	Bournemouth	NJ	Brighton	SB	Glasgow	VS	Luton
BL	Reading	FC	Oxford	JU	Leicester	NK	Luton	SC	Edinburgh	VT	Stoke-on-Trent
BM	Luton	FD	Dudley	JV	Lincoln	NL	Newcastle	SCY	Truro (Isles of Scilly)	VU	Manchester
BN	Manchester	FE	Lincoln	JW	Birmingham	NM	Luton	SD	Glasgow	VV	Northampton
BO	Cardiff	FF	Bangor	JX	Huddersfield	NN	Nottingham	SE	Aberdeen	VW	Chelmsford
BP	Portsmouth	FG	Brighton	JY	Exeter	NO	Chelmsford	SF	Edinburgh	VX	Chelmsford
BR	Newcastle	FH	Gloucester	KA	Liverpool	NP	Worcester	SG	Edinburgh	VY	Leeds
BS	Inverness	FJ	Exeter	KB	Liverpool	NR	Leicester	SH	Edinburgh	WA	Sheffield
BT	Leeds	FK	Dudley	KC	Liverpool	NS	Glasgow	SJ	Glasgow	WB	Sheffield
BU	Manchester	FL	Peterborough	KD	Liverpool	NT	Shrewsbury	SK	Inverness	WC	Chelmsford
BV	Preston	FM	Chester	KE	Maidstone	NU	Nottingham	SL	Dundee	WD	Dudley
BW	Oxford	FN	Maidstone	KF	Liverpool	NV	Northampton	SM	Glasgow	WE	Sheffield
BX	Haverfordwest	FO	Gloucester	KG	Cardiff	NW	Leeds	SN	Dundee	WF	Sheffield
BY	London NW	FP	Leicester	KH	Hull	NX	Dudley	SO	Aberdeen	WG	Sheffield
CA	Chester	FR	Preston	KJ	Maidstone	NY	Cardiff	SP	Dundee	WH	Manchester
CB	Manchester	FS	Edinburgh	KK	Maidstone	OA	Birmingham	SR	Dundee	WJ	Sheffield
CC	Bangor	FT	Newcastle	KL	Maidstone	OB	Birmingham	SS	Aberdeen	WK	Coventry
CD	Brighton	FU	Lincoln	KM	Maidstone	OC	Birmingham	ST	Inverness	WL	Oxford
CE	Peterborough	FV	Preston	KN	Maidstone	OD	Exeter	SU	Glasgow	WM	Liverpool
CF	Reading	FW	Lincoln	KO	Maidstone	OE	Birmingham	SV	(Spare)	WN	Swansea
CG	Bournemouth	FY	Bournemouth	KP	Maidstone	OF	Birmingham	SW	Carlisle	WO	Cardiff
CH	Nottingham	FX	Liverpool	KR	Maidstone	OG	Birmingham	SX	Edinburgh	WP	Worcester
CJ	Gloucester	GA	Glasgow	KS	Edinburgh	OH	Birmingham	SY	(Spare)	WR	Leeds
CK	Preston	GB	Glasgow	KT	Maidstone	OJ	Birmingham	TA	Exeter	WS	Bristol
CL	Norwich	GC	London SW	KU	Sheffield	OK	Birmingham	TB	Liverpool	WT	Leeds
CM	Liverpool	GD	Glasgow	KV	Coventry	OL	Birmingham	TC	Bristol	WU	Leeds
CN	Newcastle	GE	Glasgow	KW	Sheffield	OM	Birmingham	TD	Manchester	WV	Brighton
CO	Exeter	GF	London SW	KX	Luton	ON	Birmingham	TE	Manchester	WW	Leeds
CP	Huddersfield	GG	Glasgow	KY	Sheffield	OO	Chelmsford	TF	Reading	WX	Leeds
CR	Portsmouth	GH	London SW	LA	London NW	OP	Birmingham	TG	Cardiff	WY	Leeds
CS	Glasgow	GJ	London SW	LB	London NW	OR	Portsmouth	TH	Swansea	YA	Taunton
CT	Lincoln	GK	London SW	LC	London NW	OS	Glasgow	TJ	Liverpool	YB	Taunton
CU	Newcastle	GL	Truro	LD	London NW	OT	Portsmouth	TK	Exeter	YC	Taunton
CV	Truro	GM	Reading	LE	London NW	OU	Bristol	TL	Lincoln	YD	Taunton
CW	Preston	GN	London SW	LF	London NW	OV	Birmingham	TM	Luton	YE	London (Central)
CX	Huddersfield	GO	London SW	LG	Chester	OW	Portsmouth	TN	Newcastle	YF	London (Central)
CY	Swansea	GP	London SW	LH	London NW	OX	Birmingham	TO	Nottingham	YG	Leeds
DA	Birmingham	GR	Newcastle	LJ	Bournemouth	OY	London NW	TP	Portsmouth	YH	London (Central)
DB	Manchester	GS	Luton	LK	London NW	PA	Guildford	TR	Portsmouth	YJ	Brighton
DC	Middlesbrough	GT	London SW	LL	London NW	PB	Guildford	TS	Dundee	YK	London (Central)
DD	Gloucester	GU	London SE	LM	London NW	PC	Guildford	TT	Exeter	YL	London (Central)
DE	Haverfordwest	GV	Ipswich	LN	London NW	PD	Guildford	TU	Chester	YM	London (Central)
DF	Gloucester	GW	London SE	LO	London NW	PE	Guildford	TV	Nottingham	YN	London (Central)
DG	Gloucester	GX	London SE	LP	London NW	PF	Guildford	TW	Chelmsford	YO	London (Central)
DH	Dudley	GY	London SE	LR	London NW	PG	Guildford	TX	Cardiff	YP	London (Central)
DJ	Liverpool	HA	Dudley	LS	Edinburgh	PH	Guildford	TY	Newcastle	YR	London (Central)
DK	Manchester	HB	Cardiff	LT	London NW	PJ	Guildford	UA	Leeds	YS	Glasgow
DL	Portsmouth	HC	Brighton	LU	London NW	PK	Guildford	UB	Leeds	YT	London (Central)
DM	Chester	HD	Huddersfield	LV	Liverpool	PL	Guildford	UC	London (Central)	YU	London (Central)
DN	Leeds	HE	Sheffield	LW	London NW	PM	Guildford	UD	Oxford	YV	London (Central)
DO	Lincoln	HF	Liverpool	LX	London NW	PN	Brighton	UE	Dudley	YW	London (Central)
DP	Reading	HG	Preston	LY	London NW	PO	Portsmouth	UF	Brighton	YX	London (Central)
DR	Exeter	HH	Carlisle			PP	Luton	UG	Leeds	YY	London (Central)