Crime in the Regions



Assignment

The table below gives figures for the most serious crimes committed in regions of England and Wales in the years 2003/4 and 2004/5. The given values are rates per 100 000 of the population in each region.

Region	Violence		Sexual Offences		Burglary		Robbery		Vehicle	e Theft	Theft from	n Vehicles	Other Theft	& Handling	Fraud/l	Forgery	Crimina	l Damage	Drug Of	ffences	Otl	ner	To	tal
Kegion	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5	2003/4	2004/5
North East	1614	1636	99	106	1614	1301	113	89	528	429	970	818	2432	2185	374	314	2933	2889	318	282	149	120	11143	10168
North West	1891	2113	101	115	1901	1506	202	168	643	549	1119	981	2474	2334	487	443	2876	2845	266	274	163	137	12121	11464
Yorkshire & Humber	1892	2038	101	114	2432	1740	149	98	790	602	1536	1124	2862	2431	634	450	2866	2812	241	248	154	119	13657	11776
East Midlands	1752	1876	99	124	1933	1571	156	124	502	419	1299	1011	2688	2440	609	525	2306	2299	204	213	155	132	11702	10733
West Midlands	2024	1946	104	120	1694	1323	234	199	622	481	1080	866	2273	2031	652	551	2197	2098	272	258	184	152	11336	10024
East	1512	1586	85	93	1164	955	92	83	394	330	939	790	2237	2144	547	460	2067	1965	177	182	108	98	9322	8822
London	2543	2747	139	148	1439	1380	553	529	753	651	1417	1195	4006	3798	1078	963	2009	1841	450	459	163	148	14550	13858
South East	1411	1646	83	113	1145	1004	81	72	368	316	928	797	2301	2236	490	473	2000	2016	210	215	113	94	9130	8983
South West	1537	1722	89	105	1234	1082	96	75	359	307	1013	838	2236	2132	500	445	1890	1896	222	219	99	93	9274	8914
England	1821	1963	101	117	1582	1301	202	176	554	459	1147	944	2657	2461	620	539	2299	2242	265	267	142	121	11390	10590
Wales	1816	1816	73	88	1188	997	44	37	305	442	834	887	2563	1912	365	314	2270	2190	326	313	126	115	9911	9110
England & Wales	1821	1955	99	115	1560	1284	193	168	550	458	1140	941	2632	2431	606	527	2297	2239	269	270	141	121	11308	10508

Source: Regional Trends (Table 9.1) available from www.statistics.gov.uk

Investigate how crime figures for the region where you live compare with those for other region(s).

In your completed assignment you should:

- state clearly the aim(s) of your investigation
- select appropriate data to use
- use statistical diagrams to illustrate your findings
- use probabilities to make comparisons
- draw conclusions and summarise your findings
- comment on possible limitations of the data

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Teacher Notes

Unit Intermediate Level, Handling and interpreting data

Notes on the assignment

This assignment is intended to provide some of the evidence listed in section 1 of the coursework portfolio requirements (reproduced below).

What you need to produce	You must:							
1								
Reports of at least two investigations you carry out	• include written evidence of all mathematical							
into situations in which you show your use of	analysis and computation							
statistical techniques, measures and diagrams.								
	show evidence that in places you have used							
	both estimation and checking to ensure that							
	your work is accurate.							
In the totality of your two reports you should:								
	 present your hypothesis, raw and processed data 							
 state clearly the aims of your investigation 	clearly using tables where appropriate							
• choose a suitable sample for your investigation								
select the most appropriate data you need to	• if using a questionnaire, use questions that are							
collect	relevant, not repetitive, clear and unbiased, with							
 devise and use an appropriate data collection 	a sample of at least 25							
form								
 use a spreadsheet to record the results of your 	show that you only collected data which is							
data collection	meaningful to your investigation							
use tables to present								
(i) raw data	present diagrams that are relevant, clear and							
(ii) grouped data	accurate							
• use								
(i) measures of location and spread	express probabilities in appropriate forms							
(ii) statistical diagrams								
to summarise and compare your raw and	• show an understanding of the limitations							
grouped data	involved when you project your findings to a							
• use probability measures, if appropriate, to	larger sample							
calculate, describe and explain the likelihood of								
an event(s) occurring for the sample of your	draw conclusions that are valid and relevant in							
investigation and project your findings to a	the light of your original hypothesis							
larger sample	make qualitative reference to the converse of							
• investigate the effect of using at least two	make qualitative reference to the accuracy of your findings in the light of any arrors that there							
different groupings of part of your data on	your findings in the light of any errors that there may have been in your data and taking account							
diagrams and measures	of your sample size							
 draw conclusions and summarise your findings 	or your sample size							

The assignment gives crime figures for regions of England and Wales in the years 2003/4 and 2004/5. These figures are available on a spreadsheet with the same name. The original figures can be found in Table 9.1 of Regional Trends 39 available from www.statistics.gov.uk. Note that the presentation of the original figures is slightly different (the years are given in separate tables) and the original table also includes data for Scotland and Northern Ireland.

Students may not know the difference between some of the categories eg theft and robbery. Some definitions are given below:

Theft means taking someone's property, intending not to return it.

Robbery is where a person uses force or fear to steal from a person.

Burglary is where someone enters a building intending to steal, harm or rape someone or damage property.