

Name _____ Per. _____

AP Statistics Chapter 12 & 13 Assignments: Sampling and Experimentation

Date	Lesson	Assignment
10/1	12(1): Sampling Bias	A24: 289(1-6) & ActivStats Optional 12-1, 12-2, & 12-4
10/2	12(2): Sampling Strategies & Introduce Project	A25: 289(8, 9, 12, 18, 20, 26)
10/4	12(3): Sampling Review	A26: 289(14, 16, 22, 24, 28, 30, 32) & Partner due next class.
10/5	C 12 (Surveys) Quiz and time to work...	A27: Investigative Task - Chapter 5! See attached...
10/8	C13(1): Elements of Experimentation	A28: 313(1, 2, 3-18 X3 a-e only)
10/9	C13(2): Experimental Design	A29: A7: 313(8, 19, 26-30)
10/11	C13(3): Experimentation Review	A30: A8: 313(32, 34, 36-38, 40)
10/12	Experiments Quiz and Homecoming	No Homework - enjoy homecoming...
10/15	Review of Chapters 11-13	A31: 313(42-43) & 319(1, 9, 17, 25, 31, 41) - Tutoring at lunch on Tuesday if needed. Proposal due next class period.
LS 10/17	C 12 & 13 Test: Sampling and Experimentation test w/ simulations & C14(1)	A32: 339(1-15 odd)

Comments:

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Student Signature _____

date _____

Parent Signature _____

date _____

A27: Investigative Task - Chapter 5: Auto Safety

You work for an automobile insurance company. Your boss has assigned you the task of reviewing recent auto safety records and thinking about how that information may be relevant to your company. You found these data on the web.

HIGHWAY LOSS DATA INSTITUTE (www.hwysafety.org)
 AUTOMOBILE INSURANCE INJURY LOSSES (2000-01)

SMALL CARS		MID-SIZE CARS		LARGE CARS	
Model	Rating	Model	Rating	Model	Rating
A4 Quattro	63	Saab 9-3	58	Buick LeSabre	39
Audi A4	67	Buick Century	63	Bonneville	53
VW Beetle	69	Toyota Avalon	66	Grand Marquis	53
Volvo S40	82	Volvo S70	72	Buick Regal	57
VW Golf	91	Lexus ES 300	75	Olds Intrigue	58
Impreza	98	Saturn LS	76	Crown Victoria	63
Subaru G20	104	Acura	78	Concorde	66
Saturn SL	104	VW Passat	80	Chrysler LHS	66
Honda Civic	105	Infiniti I30	82	Chrysler 300M	70
VW Jetta	107	Maxima	94	Chevy Impala	73
Chevy Prizm	118	Chevy Malibu	97	Chevy Lumina	73
Ford Focus	120	Olds Alero	97	Grand Prix	74
Acura Integra	133	Cirrus	98	Mercury Sable	80
Nissan Sentra	134	Honda Accord	102	Monte Carlo	85
Eclipse	136	Toyota Camry	102	Ford Taurus	88
Chevy Metro	138	Grand Am	105	Dodge Intrepid	92
Ford Escort	141	Mystique	108		
Civic Coupe	143	Diamante	109		
Proton	144	Millenia	114		
Corolla	147	Ford Contour	118		
Dodge Neon	167	Dodge Stratus	122		
Accent	181	Breeze	128		
Elantra	190	Cavalier	134		
Kia Sephia	221	Mazda 626	135		
Mirage	246	Sunfire	140		
Esteem	247	Nissan Altima	144		
		Galant	164		
		Sonata	169		

Insurance injury loss results are stated in relative terms. 100 represents average result for all cars.
 Lower numbers are better. For example, a rating of 122 means 22% worse than average.

Write a brief report to your boss, including:

- appropriate comparative plots and summary statistics;
- descriptions of the injury ratings for each group of cars;
- a comparison of injury ratings for the three sizes of cars;
- your recommendation to your boss about your company's insurance policies.