

A 2010 Calendar for Statisticians and Researchers, with Weekly Tips and Morale Builders

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Friday 1-Jan

Saturday	2-Jan	S	M	T	W	T	F	S
							1	2
		3	4	5	6	7	8	9
		10	11	12	13	14	15	16
		17	18	19	20	21	22	23
		24	25	26	27	28	29	30
		31						

2010

Day 1 Week 0

2010

Day 2 Week 0

G.I. means Great Ideas

Sunday 3-Jan The p-value is the likelihood of getting the parameter value you got, assuming H_0 is correct. Therefore, if p is really small, H_0 may well be incorrect.

Monday 4-Jan

Tuesday 5-Jan

Wednesday 6-Jan

Thursday 7-Jan

Friday 8-Jan

Saturday 9-Jan

S	M	T	W	T	F	S
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2010
 Day 3 Week 1
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 Day 4 Week 1
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 Day 5 Week 1
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 Day 6 Week 1
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 Day 7 Week 1
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 Day 8 Week 1
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 Day 9 Week 1

G.I. means Great Ideas

Sunday 10-Jan "Random" is not a synonym for "accidental." A sample collected without design is accidental, not random. To claim a random sample, you must take positive steps to ensure (and document) that each member of the population has an equal chance of being included in the sample.

Monday 11-Jan

Tuesday 12-Jan

Wednesday 13-Jan Birthday of Gertrude Mary Cox (1900 – 1978)

Thursday 14-Jan

Friday 15-Jan

Saturday 16-Jan	S	M	T	W	T	F	S
						1	2
	3	4	5	6	7	8	9
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	24	25	26	27	28	29	30
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2010
 Day 10 Week 2
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 Day 11 Week 2
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 Day 12 Week 2
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 Day 13 Week 2
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 Day 14 Week 2
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 Day 15 Week 2
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 Day 16 Week 2

G.I. means Great Ideas

Sunday 17-Jan If your sample is not random, descriptive statistics are meaningful, but statistical inference is not! All statistical inference depends on random samples.

Monday 18-Jan

Tuesday 19-Jan

Wednesday 20-Jan

Thursday 21-Jan

Friday 22-Jan

Saturday 23-Jan	S	M	T	W	T	F	S
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2010 **2010** **2010** **2010** **2010** **2010** **2010**
 Day 17 Day 18 Day 19 Day 20 Day 21 Day 22 Day 23 Week 3 Week 3 Week 3 Week 3 Week 3 Week 3 Week 3

G.I. means Great Ideas

Sunday 24-Jan Phillips' Law of Longitudinal Sampling: When a panel sample suffers attrition between observations, the panel remains superior to independent samples whenever the autocorrelation of behavior exceeds the panel attrition rate.

Monday 25-Jan

Tuesday 26-Jan

Wednesday 27-Jan

Thursday 28-Jan

Friday 29-Jan

Saturday 30-Jan	S	M	T	W	T	F	S
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Day 24 Week 4
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Day 25 Week 4
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Day 26 Week 4
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Day 27 Week 4
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Day 28 Week 4
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Day 29 Week 4
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Day 30 Week 4
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Day 31 Week 4

G.I. means Great Ideas

Sunday 31-Jan When testing multiple hypotheses on a single data set, reduce alpha for each successive test. This prevents the appearance of "fishing in the data."

Monday 1-Feb

Tuesday 2-Feb

Wednesday 3-Feb

Thursday 4-Feb

Friday 5-Feb

Saturday 6-Feb	S	M	T	W	T	F	S
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Day 31 Week 5 Day 32 Week 5 Day 33 Week 5 Day 34 Week 5 Day 35 Week 5 Day 36 Week 5 Day 37 Week 5

G.I. means Great Ideas

Sunday 7-Feb Explicitly identify the population you are studying. It's embarrassing to make inferences from a sample and then not have an answer when an audience member asks "What is the population?" Oh yes, it invalidates your sample, too.

Monday 8-Feb

Tuesday 9-Feb

Wednesday 10-Feb

Thursday 11-Feb

Friday 12-Feb

Saturday 13-Feb	S	M	T	W	T	F	S
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2010 **2010** **2010** **2010** **2010** **2010**
 Day 38 Day 39 Day 40 Day 41 Day 42 Day 43 Day 44 Week 6 Week 6 Week 6 Week 6 Week 6 Week 6

G.I. means Great Ideas

Sunday 14-Feb Always identify the sample space when making statements about the probability of an event. That probability is meaningless unless all alternative events are specified.

Monday 15-Feb

Tuesday 16-Feb Birthday of Francis Galton (1822 - 1911)

Wednesday 17-Feb Birthday of Sir Ronald Aylmer Fisher (1890-1962)

Thursday 18-Feb

Friday 19-Feb

Saturday 20-Feb	S	M	T	W	T	F	S
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 Day 45 Week 7
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 Day 46 Week 7
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 Day 47 Week 7
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 Day 48 Week 7
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 Day 49 Week 7
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 Day 50 Week 7
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 Day 51 Week 7

G.I. means Great Ideas

Sunday 21-Feb Georgescu-Roegen claims Boltzmann's Ergodic Theorem is tautological; that it simply says, If you live long enough, you'll see everything.

Monday 22-Feb

Tuesday 23-Feb

Wednesday 24-Feb

Thursday 25-Feb

Friday 26-Feb

Saturday 27-Feb	S	M	T	W	T	F	S
		1	2	3	4	5	6
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 Day 58 Week 8
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 Day 57 Week 8
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 Day 56 Week 8
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 Day 55 Week 8
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 Day 54 Week 8
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 Day 53 Week 8
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 Day 52 Week 8

G.I. means Great Ideas

Sunday 28-Feb Kress's Corollary to the Ergodic Theorem: "Especially if you travel!"

Monday 1-Mar

Tuesday 2-Mar

Wednesday 3-Mar

Thursday 4-Mar

Friday 5-Mar

Saturday 6-Mar	S	M	T	W	T	F	S
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2010 **2010** **2010** **2010** **2010** **2010** **2010**
 Day 59 Day 60 Day 61 Day 62 Day 63 Day 64 Day 65 Week 9 Week 9 Week 9 Week 9 Week 9 Week 9 Week 9

G.I. means Great Ideas

Sunday 7-Mar Many standard statistical tests (including, for instance, ANOVA) depend on the sample statistics having a normal distribution. Especially in management research, this condition is not always met. In such cases, fall back on non-parametric tests or Tchebysheff's Theorem.

Monday 8-Mar

Tuesday 9-Mar

Wednesday 10-Mar

Thursday 11-Mar

Friday 12-Mar

Saturday 13-Mar	S	M	T	W	T	F	S
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	28	29	30	31			

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Day 66 Week 10
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Day 67 Week 10
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Day 68 Week 10
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Day 69 Week 10
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Day 70 Week 10
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Day 71 Week 10
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Day 72 Week 10

G.I. means Great Ideas

Sunday 14-Mar Most non-normal (or non-exponential family) probability laws found in business studies are of the "long, fat tail" type, which includes the power distribution. For example, the sizes of companies in an industry follow the Yule distribution.

Monday 15-Mar

Tuesday 16-Mar

Wednesday 17-Mar

Thursday 18-Mar

Friday 19-Mar

Saturday 20-Mar	S	M	T	W	T	F	S
		1	2	3	4	5	6
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Day 73 Week 11
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Day 74 Week 11
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Day 75 Week 11
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Day 76 Week 11
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Day 77 Week 11
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Day 78 Week 11
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Day 79 Week 11

G.I. means Great Ideas

Sunday 21-Mar An inequality constraint on a parameter results in a "half degree of freedom" in your significance test, which does not appear in tables, and which statistical software cannot handle. For example, find a least-squares regression for $y = ax+b$ where a must be greater than or equal to zero. Use interpolation or common sense when deciding significance.

Monday 22-Mar

Tuesday 23-Mar

Wednesday 24-Mar

Thursday 25-Mar

Friday 26-Mar	S	M	T	W	T	F	S
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	28	29	30	31			

Saturday 27-Mar Birthday of Karl Pearson (1857 – 1936)

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Day 80 Week 12
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Day 81 Week 12
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Day 82 Week 12
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Day 83 Week 12
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Day 84 Week 12
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Day 85 Week 12
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Day 86 Week 12

G.I. means Great Ideas

Sunday 28-Mar The common variance of two variates is called covariance. When a distribution has two modes, they are called commodes. When a distribution has two medians, they are called comedians.

Monday 29-Mar

Tuesday 30-Mar

Wednesday 31-Mar

Thursday 1-Apr US Census Day. Also, April Fools Day. (Only one of the statements in the March 28 tip is true.)

Friday	2-Apr	S	M	T	W	T	F	S
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Saturday 3-Apr Birthday of Solomon Kullback (1907 - 1994)

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Day 87 Week 13
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Day 88 Week 13
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Day 89 Week 13
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Day 90 Week 13
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Day 91 Week 13
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Day 92 Week 13
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Day 93 Week 13

G.I. means Great Ideas

Sunday 4-Apr 80% of your total study error is likely to be non-sampling error. Worry less about the power of your test, and more about collecting good data and processing the data accurately.

Monday 5-Apr

Tuesday 6-Apr

Wednesday 7-Apr

Thursday 8-Apr

Friday 9-Apr

Saturday 10-Apr	S	M	T	W	T	F	S
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Day 94 Week 14
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Day 95 Week 14
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Day 96 Week 14
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Day 97 Week 14
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Day 98 Week 14
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Day 99 Week 14
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Day 100 Week 14

G.I. means Great Ideas

Sunday 11-Apr In business and social science studies, you cannot completely control non-experimental variables. Instead, describe what steps you've taken to minimize variation in all variables except those representing your experimental treatment.

Monday 12-Apr Birthday of Kirstine Smith (1878-1939)

Tuesday 13-Apr

Wednesday 14-Apr

Thursday 15-Apr

Friday 16-Apr Birthday of Jerzy Neyman (1894 - 1981)

Saturday 17-Apr	S	M	T	W	T	F	S
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 Day 101 Week 15
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 Day 102 Week 15
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 Day 103 Week 15
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 Day 104 Week 15
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 Day 105 Week 15
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 Day 106 Week 15
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 Day 107 Week 15

G.I. means Great Ideas

Sunday 18-Apr If you are doing observational studies (non-experimental), use last week's tip AND describe what steps you've taken to maximize the opportunity for variation in the variables that appear in your hypotheses.

Monday 19-Apr

Tuesday 20-Apr

Wednesday 21-Apr

Thursday 22-Apr

Friday 23-Apr

Saturday 24-Apr	S	M	T	W	T	F	S
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Day 108 Week 16
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Day 109 Week 16
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Day 110 Week 16
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Day 111 Week 16
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Day 112 Week 16
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Day 113 Week 16
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Day 114 Week 16

G.I. means Great Ideas

Sunday 25-Apr In research, peoples opinions about facts are poor substitutes for the facts themselves. (Unless your research question is explicitly about opinions!) Instead of asking "Do you think your company's accounts receivable are higher than your competitors," ask each competitor for the true value of their accounts receivable!

Monday 26-Apr

Tuesday 27-Apr

Wednesday 28-Apr

Thursday 29-Apr

Friday 30-Apr Birthday of Carl Friedrich Gauss (1777 - 1855)

Saturday	1-May	S	M	T	W	T	F	S
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		23	24	25	26	27	28	29
		30	31					

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 Day 115 Week 17
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 Day 116 Week 17
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 Day 117 Week 17
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 Day 118 Week 17
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 Day 119 Week 17
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 Day 120 Week 17
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 Day 121 Week 17

G.I. means Great Ideas

Sunday 2-May If Joe circles "2" on a Likert-scale opinion questionnaire and Sam circles "4," it is meaningless to say "Sam feels exactly twice as strongly as Joe." The Likert scale is ordinal. If you intend to use Likert-scale data as ratio-scale, you must justify this use carefully.

Monday 3-May

Tuesday 4-May

Wednesday 5-May

Thursday 6-May

Friday 7-May

Saturday 8-May	S	M	T	W	T	F	S
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	2	3	4	5	6	7	8
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	23	24	25	26	27	28	29
	30	31					

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 Day 122 Week 18
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 Day 123 Week 18
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 Day 124 Week 18
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 Day 125 Week 18
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 Day 126 Week 18
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 Day 127 Week 18
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 Day 128 Week 18

G.I. means Great Ideas

Sunday 9-May Be careful using Cronbach's Alpha to validate Likert-scale questions. Cronbach's Alpha assumes ratio-scale data! And last week's tip showed why Likert-scale data generally should not be considered ratio-scale.

Monday 10-May

Tuesday 11-May

Wednesday 12-May Birthday of Frank Yates (1902 - 1994)

Thursday 13-May

Friday 14-May

Saturday 15-May

2010 Week 19 Day 129 Week 19 Day 130 Week 19 Day 131 Week 19 Day 132 Week 19 Day 133 Week 19 Day 134 Week 19 Day 135

G.I. means Great Ideas

Sunday 16-May It's good to reverse your scale on certain questions, just to keep your respondents alert and forestall "pattern responses."

Monday 17-May

Tuesday 18-May

Wednesday 19-May

Thursday 20-May

Friday 21-May

Saturday 22-May	S	M	T	W	T	F	S
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	2	3	4	5	6	7	8
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 Day 136 Week 20
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 Day 137 Week 20
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 Day 138 Week 20
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 Day 139 Week 20
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 Day 140 Week 20
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 Day 141 Week 20
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 Day 142 Week 20

G.I. means Great Ideas

Sunday 23-May If you do reverse scale on parts of your questionnaire, remember to un-reverse them before applying Cronbach's Alpha.

Monday 24-May

Tuesday 25-May

Wednesday 26-May Birthday of Abraham de Moivre (1667 - 1754)

Thursday 27-May

Friday 28-May

Saturday 29-May	S	M	T	W	T	F	S
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	2	3	4	5	6	7	8
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	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
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Day 143 Week 21
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Day 144 Week 21
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Day 145 Week 21
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Day 146 Week 21
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Day 147 Week 21
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Day 148 Week 21
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Day 149 Week 21

G.I. means Great Ideas

Sunday 30-May All this reversing and un-reversing of data increases the chances of data-processing errors. Triple-check your work.

Monday 31-May

Tuesday 1-Jun

Wednesday 2-Jun

Thursday 3-Jun

Friday 4-Jun

Saturday	5-Jun	S	M	T	W	T	F	S
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 Day 150 Week 22
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 Day 151 Week 22
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 Day 152 Week 22
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 Day 153 Week 22
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 Day 154 Week 22
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 Day 155 Week 22
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 Day 156 Week 22

G.I. means Great Ideas

Sunday 6-Jun *Accuracy* has to do with whether your answer is correct. *Precision* has to do with how many significant digits you are measuring. *Reliability* has to do with the chances you will get the same answer if you repeat the observation.

Monday 7-Jun

Tuesday 8-Jun

Wednesday 9-Jun

Thursday 10-Jun

Friday 11-Jun

Saturday 12-Jun	S	M	T	W	T	F	S
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 Day 157 Week 23
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 Day 158 Week 23
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 Day 159 Week 23
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 Day 160 Week 23
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 Day 161 Week 23
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 Day 162 Week 23
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 Day 163 Week 23

G.I. means Great Ideas

Sunday 13-Jun *Replicability* has to do with whether another scientist can duplicate your work and get a similar result, based on the procedures you have described.

Monday 14-Jun

Tuesday 15-Jun

Wednesday 16-Jun Birthday of John Wilder Tukey (1915 – 2000)

Thursday 17-Jun

Friday 18-Jun

Saturday 19-Jun	S	M	T	W	T	F	S
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 Day 164 Week 24
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 Day 165 Week 24
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 Day 166 Week 24
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 Day 167 Week 24
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 Day 168 Week 24
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 Day 169 Week 24
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 Day 170 Week 24

G.I. means Great Ideas

Sunday 20-Jun *Credibility* has to do with your reputation as a researcher. It is not strictly a numerical quality. Credibility comes from your track record of careful measurement, judicious reasoning, and ethical performance - as well as from others' perception that your results are plausible.

Monday 21-Jun

Tuesday 22-Jun

Wednesday 23-Jun

Thursday 24-Jun

Friday 25-Jun

Saturday 26-Jun	S	M	T	W	T	F	S
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Day 171 Week 25
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Day 172 Week 25
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Day 173 Week 25
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Day 174 Week 25
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Day 175 Week 25
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Day 176 Week 25
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Day 177 Week 25

G.I. means Great Ideas

Sunday 27-Jun Statistical significance is not the same as managerial significance. A statistician may not feel right about claiming a result with less than 90% significance, but the profit potential of the result may be such that a manager will act on it if it shows only a 70% significance. Contrariwise, the business risk may be so high that it would take a 98% significance before a manager would commit resources to it.

Monday 28-Jun

Tuesday 29-Jun

Wednesday 30-Jun

Thursday 1-Jul

Friday 2-Jul

Saturday	3-Jul	S	M	T	W	T	F	S
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 Day 178 Week 26
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 Day 179 Week 26
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 Day 180 Week 26
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 Day 181 Week 26
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 Day 182 Week 26
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 Day 183 Week 26
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 Day 184 Week 26

G.I. means Great Ideas

Sunday	4-Jul	'Research' is a noun, but we can still conjugate it... <i>My</i> research is brilliant. <i>Your</i> research is promising. <i>His/her</i> research is sometimes of interest. <i>Our</i> research is synergistic (but I wish <i>you</i> would work faster...) <i>Their</i> research is sheer flapdoodle.						
Monday	5-Jul							
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Friday	9-Jul							
Saturday	10-Jul	S	M	T	W	T	F	S
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 Day 185 Week 27
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 Day 186 Week 27
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 Day 187 Week 27
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 Day 188 Week 27
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 Day 189 Week 27
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 Day 190 Week 27
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 Day 191 Week 27

G.I. means Great Ideas

Sunday 18-Jul The word "data" is plural. The singular is "datum."

Monday 19-Jul

Tuesday 20-Jul

Wednesday 21-Jul

Thursday 22-Jul

Friday 23-Jul

Saturday 24-Jul	S	M	T	W	T	F	S
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 Day 199 Week 29
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 Day 200 Week 29
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 Day 201 Week 29
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 Day 202 Week 29
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 Day 203 Week 29
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 Day 204 Week 29
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 Day 205 Week 29

G.I. means Great Ideas

Sunday 25-Jul The concept of probability applies only to the unknown future. The world today is what it is, and that's that; there is no purpose in speaking of the "probability" of the current state of affairs. As a formalism, we sometimes speak of the "likelihood" of a past event; but even if we calculate the likelihood exactly as we would a probability, we must still specify the sample space. Failure to do this is at the root of fallacies like "The probability of the evolution of the human eye is too small for

Monday 26-Jul

Tuesday 27-Jul

Wednesday 28-Jul

Thursday 29-Jul

Friday 30-Jul

Saturday 31-Jul

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 Day 206 Week 30
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 Day 207 Week 30
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 Day 208 Week 30
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 Day 209 Week 30
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 Day 210 Week 30
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 Day 211 Week 30
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 Day 212 Week 30

G.I. means Great Ideas

Sunday 1-Aug Three students were vacationing by train in Belgium. Through the window, they spied a cow. The average student remarked, "Oh, so there are brown cows in Belgium." The good student said, "Well, this cow is brown." The superior student added, "This cow is brown on this side." This illustrates the careful observation and critical thought that good research requires.

Monday 2-Aug

Tuesday 3-Aug

Wednesday 4-Aug

Thursday 5-Aug

Friday 6-Aug

Saturday 7-Aug	S	M	T	W	T	F	S
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Day 213 Week 31
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Day 214 Week 31
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Day 215 Week 31
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Day 216 Week 31
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Day 217 Week 31
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Day 218 Week 31
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Day 219 Week 31

G.I. means Great Ideas

Sunday 8-Aug You can't use variation in X to account for variation in Y if there is no variation in X. Furthermore, too little variation in X means variation in extraneous effects T, U, and V may overshadow the effects of X, spoiling your study. Structure your research question so that it is possible to find significant variation in X. Variation may occur between geographic regions, between the sexes, between red products and blue products, or between income strata.

Monday 9-Aug

Tuesday 10-Aug

Wednesday 11-Aug

Thursday 12-Aug

Friday 13-Aug

Saturday 14-Aug	S	M	T	W	T	F	S
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 Day 220 Week 32
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 Day 221 Week 32
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 Day 222 Week 32
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 Day 223 Week 32
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 Day 224 Week 32
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 Day 225 Week 32
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 Day 226 Week 32

G.I. means Great Ideas

Sunday 15-Aug Hypotheses must flow either from theory or observation. To say, "I wonder whether there's a difference between X and Y," without a theoretical or experiential reason for saying it, is just random curiosity - admirable perhaps, but it is not research.

Monday 16-Aug

Tuesday 17-Aug

Wednesday 18-Aug

Thursday 19-Aug

Friday 20-Aug

Saturday 21-Aug	S	M	T	W	T	F	S
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 Day 227 Week 33
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 Day 228 Week 33
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 Day 229 Week 33
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 Day 230 Week 33
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 Day 231 Week 33
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 Day 232 Week 33
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 Day 233 Week 33

G.I. means Great Ideas

Sunday 22-Aug Certainty increases only as the square root of sample size. To make the confidence interval half as wide, you must make the sample four times bigger. Is it worth the cost? Consider carefully.

Monday 23-Aug Birthday of Florence Nightingale David (1909 - 1993)

Tuesday 24-Aug

Wednesday 25-Aug

Thursday 26-Aug

Friday 27-Aug

Saturday 28-Aug	S	M	T	W	T	F	S
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

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 Day 234 Week 34
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 Day 235 Week 34
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 Day 236 Week 34
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 Day 237 Week 34
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 Day 238 Week 34
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 Day 239 Week 34
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 Day 240 Week 34

G.I. means Great Ideas

Sunday 29-Aug If the *odds* against a horse are 5:4, the bookmakers believe the probability of the horse winning the race is $p = 4/(5+4) = 4/9$. The odds for the win are $p/(1-p)$, and the odds against are $(1-p)/p$. This principle is applied also (though it's less fun than the races) in logistic regression, in which the dependent variable is the log-odds of an event.

Monday 30-Aug

Tuesday 31-Aug

Wednesday 1-Sep

Thursday 2-Sep

Friday 3-Sep	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

Saturday 4-Sep Birthday of Abraham Charnes (1917 - 1992)

2010 Day 247 Week 35
2010 Day 246 Week 35
2010 Day 245 Week 35
2010 Day 244 Week 35
2010 Day 243 Week 35
2010 Day 242 Week 35
2010 Day 241 Week 35

G.I. means Great Ideas

Sunday 5-Sep Love your research topic; it may turn into a career. Never fall in love with your hypothesis; it might be wrong.

Monday 6-Sep

Tuesday 7-Sep

Wednesday 8-Sep

Thursday 9-Sep

Friday 10-Sep Birthday of C.R. Rao (b. 1920)

Saturday 11-Sep	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

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 Day 248 Week 36
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 Day 249 Week 36
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 Day 250 Week 36
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 Day 251 Week 36
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 Day 252 Week 36
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 Day 253 Week 36
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 Day 254 Week 36

G.I. means Great Ideas

Sunday 12-Sep Statistics never prove anything! The best we can do with statistics is to say that based on current evidence we reject (or "fail to reject") a hypothesis *at the specified significance level*.

Monday 13-Sep

Tuesday 14-Sep

Wednesday 15-Sep

Thursday 16-Sep

Friday 17-Sep

Saturday 18-Sep	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

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 Day 255 Week 37
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 Day 256 Week 37
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 Day 257 Week 37
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 Day 258 Week 37
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 Day 259 Week 37
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 Day 260 Week 37
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 Day 261 Week 37

G.I. means Great Ideas

Sunday 19-Sep We can *predict* values of Y by fitting a curve or by dumb luck. To *explain* why Y is what it is requires theory. It's nice to have both explanatory and predictive power, but they are not the same thing.

Monday 20-Sep

Tuesday 21-Sep

Wednesday 22-Sep

Thursday 23-Sep

Friday 24-Sep

Saturday 25-Sep	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

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Day 262 Week 38
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Day 263 Week 38
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Day 264 Week 38
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Day 265 Week 38
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Day 266 Week 38
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Day 267 Week 38
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Day 268 Week 38

G.I. means Great Ideas

Sunday 26-Sep A *census* measures every member of a population. When almost all the members of a population are measured, inferential statistics are not needed. It is a mistake to speak of confidence intervals or significance levels in a census.

Monday 27-Sep

Tuesday 28-Sep

Wednesday 29-Sep

Thursday 30-Sep

Friday 1-Oct

Saturday	2-Oct	S	M	T	W	T	F	S
							1	2
		3	4	5	6	7	8	9
		10	11	12	13	14	15	16
		17	18	19	20	21	22	23
		24	25	26	27	28	29	30
		31						

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 Day 269 Week 39
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 Day 270 Week 39
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 Day 271 Week 39
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 Day 272 Week 39
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 Day 273 Week 39
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 Day 274 Week 39
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 Day 275 Week 39

G.I. means Great Ideas

Sunday 3-Oct Factor analysis groups *variables*; cluster analysis groups *observations*.

Monday 4-Oct

Tuesday 5-Oct

Wednesday 6-Oct

Thursday 7-Oct

Friday 8-Oct

Saturday 9-Oct	S	M	T	W	T	F	S
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

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 Day 276 Week 40
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 Day 277 Week 40
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 Day 278 Week 40
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 Day 279 Week 40
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 Day 280 Week 40
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 Day 281 Week 40
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 Day 282 Week 40

G.I. means Great Ideas

Sunday 10-Oct It's easy to teach statistical analysis, and difficult to teach good data collection and data processing practices. That's why universities offer classes in the former but not the latter. Every researcher must take responsibility for the integrity of her/his own data.

Monday 11-Oct

Tuesday 12-Oct

Wednesday 13-Oct

Thursday 14-Oct Birthday of William Edwards Deming (1900 – 1993)

Friday 15-Oct

Saturday 16-Oct	S	M	T	W	T	F	S
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

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Day 283 Week 41
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Day 284 Week 41
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Day 285 Week 41
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Day 286 Week 41
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Day 287 Week 41
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Day 288 Week 41
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Day 289 Week 41

G.I. means Great Ideas

Sunday 17-Oct Don't confuse autocorrelation of residuals - a danger signal in regression - with autocorrelation of the regressor variable, which can be turned to the researcher's advantage in panel analysis.

Monday 18-Oct Birthday of George Edward Pelham Box (b.1919)

Tuesday 19-Oct

Wednesday 20-Oct

Thursday 21-Oct

Friday 22-Oct

Saturday 23-Oct	S	M	T	W	T	F	S
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

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Day 290 Week 42
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Day 291 Week 42
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Day 292 Week 42
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Day 293 Week 42
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Day 294 Week 42
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Day 295 Week 42
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Day 296 Week 42

G.I. means Great Ideas

Sunday 24-Oct Don't confuse random *selection* of sample units with random *assignment* of sample units to treatment groups.

Monday 25-Oct

Tuesday 26-Oct

Wednesday 27-Oct

Thursday 28-Oct

Friday 29-Oct

Saturday 30-Oct	S	M	T	W	T	F	S
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

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 Day 297 Week 43
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 Day 298 Week 43
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 Day 299 Week 43
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 Day 300 Week 43
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 Day 301 Week 43
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 Day 302 Week 43
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 Day 303 Week 43

G.I. means Great Ideas

Sunday 31-Oct "Eighty-seven percent of all statistics are made up on the spot."
- Steven Wright

Monday 1-Nov

Tuesday 2-Nov

Wednesday 3-Nov

Thursday 4-Nov

Friday 5-Nov

Saturday 6-Nov	S	M	T	W	T	F	S
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				

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Day 304 Week 44 Day 305 Week 44 Day 306 Week 44 Day 307 Week 44 Day 308 Week 44 Day 309 Week 44 Day 310 Week 44

G.I. means Great Ideas

Sunday 7-Nov See www.quote garden.com/statistics.html for amusing and enlightening quotations on the subject of statistics.

Monday 8-Nov

Tuesday 9-Nov

Wednesday 10-Nov

Thursday 11-Nov

Friday 12-Nov

Saturday 13-Nov	S	M	T	W	T	F	S
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				

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 Day 317 Week 45
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 Day 316 Week 45
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 Day 315 Week 45
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 Day 314 Week 45
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 Day 313 Week 45
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 Day 312 Week 45
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 Day 311 Week 45

G.I. means Great Ideas

Sunday 14-Nov Your data analysis is visible to your readers, and is easily reviewed. Your data collection/entry procedures are usually not visible to others. Every researcher must take responsibility for the integrity of her/his own data.

Monday 15-Nov

Tuesday 16-Nov

Wednesday 17-Nov

Thursday 18-Nov

Friday 19-Nov

Saturday 20-Nov	S	M	T	W	T	F	S
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				

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Day 318 Week 46
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Day 319 Week 46
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Day 320 Week 46
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Day 321 Week 46
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Day 322 Week 46
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Day 323 Week 46
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Day 324 Week 46

G.I. means Great Ideas

Sunday 21-Nov "On the Internet, no one knows you're a dog," or so claims the famous *New Yorker* cartoon in which a dog sits at a keyboard. The Internet has spawned a culture of "false personae" in which people feel free to represent themselves as younger, richer, more attractive, or differently gendered than strict truth would permit. This poses risks for the accuracy of demographic data gathered from Web surveys.

Monday 22-Nov

Tuesday 23-Nov

Wednesday 24-Nov

Thursday 25-Nov

Friday 26-Nov

Saturday 27-Nov	S	M	T	W	T	F	S
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				

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 Day 325 Week 47
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 Day 326 Week 47
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 Day 327 Week 47
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 Day 328 Week 47
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 Day 329 Week 47
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 Day 330 Week 47
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 Day 331 Week 47

G.I. means Great Ideas

Sunday 28-Nov Specify ways in which your *sampling frame* may not represent all members of your study population. For example, telephone directories, never a complete listing of households, are even worse in the 21st century due to the growing substitution of cell phones for land lines.

Monday 29-Nov

Tuesday 30-Nov

Wednesday 1-Dec

Thursday 2-Dec

Friday 3-Dec

Saturday 4-Dec	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	

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Day 332 Week 48
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Day 333 Week 48
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Day 334 Week 48
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Day 335 Week 48
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Day 336 Week 48
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Day 337 Week 48
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Day 338 Week 48

G.I. means Great Ideas

Sunday 5-Dec

A perfect nonlinear relationship between x and y (e.g., $y=x^2$, in which variation in x accounts for *all* variation in y) can fail to show a significant correlation coefficient. The correlation coefficient represents only the extent of the *linear* relationship between two variables.

Monday 6-Dec

Tuesday 7-Dec

Wednesday 8-Dec

Thursday 9-Dec

Friday 10-Dec

Saturday	11-Dec	S	M	T	W	T	F	S
					1	2	3	4
		5	6	7	8	9	10	11
		12	13	14	15	16	17	18
		19	20	21	22	23	24	25
		26	27	28	29	30	31	

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 Day 339 Week 49
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 Day 340 Week 49
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 Day 341 Week 49
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 Day 342 Week 49
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 Day 343 Week 49
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 Day 344 Week 49
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 Day 345 Week 49

G.I. means Great Ideas

Sunday 12-Dec It is complicated and tedious to statistically support the idea that x causes y - and it still does not constitute proof of causation. It is rare that it is worthwhile to make a claim of causation, especially in the management sciences. If you lack a very strong reason to do otherwise, restrict your claims to demonstrations that x is related to y.

Monday 13-Dec

Tuesday 14-Dec

Wednesday 15-Dec

Thursday 16-Dec

Friday 17-Dec

Saturday 18-Dec	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	

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 Day 346 Week 50
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 Day 347 Week 50
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 Day 348 Week 50
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 Day 349 Week 50
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 Day 350 Week 50
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 Day 351 Week 50
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 Day 352 Week 50

G.I. means Great Ideas

Sunday 19-Dec To make a Type I error is to call a false positive; a Type II error is a false negative. Raiffa described the Type III error, unintentionally solving the wrong problem correctly. Mitroff extended that idea to the Type IV error: deliberately stating and solving the wrong problem. This is an act of political misdirection, usually motivated by narrow self-interest.

Monday 20-Dec

Tuesday 21-Dec

Wednesday 22-Dec

Thursday 23-Dec

Friday 24-Dec It's a holiday. Don't think about statistics today. Or tomorrow.

Saturday 25-Dec	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	

2010
Day 353 Week 51
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Day 354 Week 51
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Day 355 Week 51
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Day 356 Week 51
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Day 357 Week 51
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Day 358 Week 51
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Day 359 Week 51

G.I. means Great Ideas

Sunday 26-Dec

Monday 27-Dec

Tuesday 28-Dec

Wednesday 29-Dec

Thursday 30-Dec

Friday 31-Dec A prediction of the number of glasses of champagne you and your friends will drink tonight will be improved by averaging in the batting records of your home team's starting squad, as well as the average selling prices of used cars in your zip code. This is the "James-Stein paradox" in statistics. Strange but true, it's something to think about while you wait for midnight and the new year.

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Day 360 Week 52
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Day 361 Week 52
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Day 362 Week 52
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Day 363 Week 52
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Day 364 Week 52
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Day 365 Week 52