ID	#Q	T=Thinking Critically	
177	1005.5	CARE: C=Context, A=Assembly, R=Randomness, E=Error/Bias	
ID	180	**CHAPTER 1:**	
C1A	10	T: Identify the most disputable claim	
C1B	**10**	T: Distinguish types of inference	
C1C	10	T: Distinguish deterministic, probabilistic causation	
C1D	10	C: Determine if event is repeatable or condition is switchable	
C1E	10	C: Determine if study is repeatable	
C1F	10	T: Distinguish Association-Causation in time-independent studies	
C1G	**10**	T: Distinguish Association-Causation in time-based studies	
C1H	**10**	T: Distinguish Association-causation: Likely/risk/can expect	
C1I	10	T: Distinguish causal phrases	
C1J		**C: Is this a survey, study or other?**	
C1K	**10**	C: Distinguish common cause, confounder and mechanism	
C1L	10	C: Determine effect of confounder on a statistic	
C1O	10	A: Identify which definition gives a higher count or total	
C1P	10	A: Calculate effect of grouping on counts	
C1Q	10	A: Impact of word change on number	
C1R	5	A: Defining groups to increase/decrease number (essay)	
C1T	10	R: Law of Very Large Numbers	
C1V	5	E: Distinguish major types of error or bias	
C1X	10	X: Distinguish Confounding, Assembly, Randomness and Error	
		T: Distinguish different sense of "Can"	
C1Z	10	T: Identify most observable vs. least observable	
ID	190	**CHAPTER 2:**	Add section on numbers. Exercise on rounding to nearest 5, 10, 20, 100.
C2A	10	Identify compare given type, test and base (incl. %pt)	
C2B	10	Identify type comparison given full compare (incl %pt)	
C2C	10	Calculate size of comparison given test, base and compare grammar	
C2D	10	Identify compare given test, base and size (Incl %pt)	
C2E	10	**Compare percentages and rates (Incl %pt)**	
C2F	10	Identify biggest comparison of two numbers	
C2G	10	Calculate test or base given opposite and compare (Incl %pt)	
C2H	10	Compare test and base after scaling (Incl %pt)	
C2I	10	Calculate effect of definitions on averages	
C2J	***10***	Distinguish Longitudinal vs. cross-sectional association	NEW
C2K	10	Distinguish longitudinal cohort from non-cohort	
C2L	10	Distinguish Experiment vs. observational	
C2M	10	Distinguish Controlled vs. uncontrolled	
C2N	10	Distinguish Longitudinal (controlled vs. uncontrolled) vs cross-sectional	
C2O	10	Law of Large Numbers	
C2P	10	Randomness Determine statistical significance from ME	
C2Q	10	If bias is created or eliminated, identify which type of bias.	
C2R	20	Write re-definitions to increase/decrease count	NEW
C2S		C: Grammar of Change (1st & 2nd derivative)	
C2T		C: Which comparison best supports point?	
C2M1		Xsec vs Long (controlled vs ucontrolled)	
C2E1		calculation Pctg Pt given rate and %chg	Estimate the implications of statistics if true
C2E2		Calculate %chg given rate and PctgPtDiff	Estimate effect of randomness given sample size
C2E3		Calc test & base given %chg and PctgPtDiff	

C20		Write out different types of comparisons	
ID	156	**CHAPTER 3: MEASUREMENTS**	Genrate rankings from ranks, from z-scores, from measures/pcts
C3A	5	Calculate & compare ranks from scores	
C3B		Calculate percentiles from ranks	
C3C	8	Identify which percentile, score or rank is higher	
C3D	10	Identify which mean is higher in closely related groups	
C3E	13	Compare averages from extremes of a distribution	
C3F	5	Calculate weighted average given subgroup averages	
C3G	10	Calculate mean, median & mode given data values	
C3H	20	*Write comparisons of ranks, percentiles, modes, medians & means*	
C3I	10	Compare counts before/after control of size group	
C3J	5	Calculate % explained given averages before/after standardization	
C3K	30	Standardize measures for binary confounder (1, 2, 3)	
C3L	10	Calculate & compare Z-scores	
C3M	10	Calculate & compare Normalized scores	
C3N		Calculate Prediction Intervals	
C3O		Calculate & compare Coefficients of Variation	
C3P	10	Calculate & compare Effect Sizes	
C3Q	10	Predict outcome given regression & predictor	
C3R		Calculate correlation from slope and std deviation	
C3S		Compare correlations.	
C3T		Calculate "percentage explained" from correlations	
C3U		Predict outcome given correlation, SD & predictor	
C3V		Calculate Prediction Interval from correlation, SD & predictor	
C3W		Excel: Identify effect of outlier on slope and correlation	
C31		*Write out comparisons of numbers*	
C32		*Write out comparisons of statistics that have units*	
ID	181	**CHAPTER 4: DESCRIBING RATIOS**	
C4A	10	Identify part in percent grammar statements	
C4B	10	Calculate percentages from simple count tables	
C4C	5	Identify part in questions using "What percentage…"	
C4D	10	Identify part in percentage grammar statements	
C4E	10	Convert statements: percentage to percent grammar	
C4F	10	Convert statement: percent to percentage grammar	
C4G	5	Identify part in questions using "What is the percentage…"	
C4H	10	Identify part in statements: percent or percentage grammar	
C4I	10	Identify part in questions: percent or percentage grammar	
C4J	5	Identify complement to a percentage. Identify influence of assembly.	
C4K	20	Calculate percentage from a complex count table (religious preference)	
C4L	10	Identify influence of assembly on percentages and rates.	
C4M		**Identify part/whole or correct description in 100% tables**	
C4N		**Identify part/whole or correct description in complex percentage tables**	
C4O	5	**Identify part/whole or description in percentage graphs**	
C4P	10	Calculate rate per K given numerator and denominator	
C4Q	10	Identify part in phrase-based rate statement	
C4R	10	Identify equivalent phrase-based rate statement given "Per" ratio	
C4S	10	Identify part in clause-based rate statement	
C4T	5	Translate between phrase-based & clause-based rate grammar	
C4U	10	Identify part(s) and whole(s) in chance grammar statements	

C4V	5	Calculate 1 chance in N given numerator and denominator
C4W	1	Use web-based Reading/Decoding program.
C4X		Convert rates to different basis
C4Y	1	Use Web-based Writing program
C40		*Convert statements: Percentage to percent grammar (and vice versa)*
C41		*Convert percent/percentage questions to statements (and vice versa)*
C42		*Describe percentages in count table using percent and percentage grammar*
C43		*Describe percentages in 100% table using percent and percentage grammar*
C44		*Describe percentages in complex margined tables using percent and percentage grammar*
C45		*Describe percentages in complex missing-margin tables using percent and percentage grammar*
C46		*Convert rates: phrase to clause form (and vice versa)*
C47		*Describe rate in tables*
ID	97	**CHAPTER 5: COMPARING RATIOS**
C5A	10	Calculate percentage attributable from percentage/rate data.
C5B	5	Calculate cases attributable given rates and # of cases/exposure
C5C		**Determine if compare is common or distinct part: table or graph**
C5D	10	Percentage-grammar compare: identify common-part and base whole
C5E	5	Percentage-grammar compare: identify if common or distinct part
C5F	10	**Percentage grammar: Identify correct compare given statements/tables/graphs**
C5G	10	Rate-phrase compare statement: identify common part, base whole
C5H	5	Rate-phrase compare statement: Determine if common or distinct part
C5I		**Rate-phrase grammar: Identify correct compare given statements/table/graph**
C5J	10	Rate-clause compare statement: identify common part, base whole
C5K	5	Rate-clause compare statement: Determine if common or distinct part
C5L		Rate-clause grammar: Identify correct compare given statements/tables/graphs
C5M		Chance grammar: Identify common part and base whole
C5N		Chance grammar: Determine if common or distinct part compare
C5O		Chance grammar: Identify correct compare given statements/tables/graphs
C5P	10	Likely grammar common-part compare: identify common part and base whole
C5Q	5	Likely grammar: Determine if common or distinct part
C5R	5	Likely grammar: Identify correct compare given percentage statements
C5S	5	Likely grammar: Identify correct compare given rate statements
C5T		Likely grammar: Identify correct compare given chance statements
C5U		Likely grammar: Identify correct compare given percentage tables/graphs
C5V		Likely grammar: Identify correct compare given rate tables/graphs
C5W	1	Use web reading program. Decode comparisons
C5X		Identify direction given involvement, Bayes compare or data
C5Y	1	Use web writing program: Generate comparisons
C5Z1		Generate Bayes comparison given rates, charts or row/col tables
C5Z2		Calculate 4th rate given other three

ID	124	**CHAPTER 6: INTERPRETING RATIOS**
C6A	10	Inverse ratios
C6B	10	Compare two related three-factor percentages
C6C	10	Higher percentage: Same part in related wholes
C6D	10	Bigger 3 factor percentage: Same whole, related parts
C6E	10	Identify which percentage predicts or explains
C6F	14	Calculate prediction and explanation in 2x2 tables (F1)
C6G	14	Calculate prediction given quality and prevalence
C6H		Calculate weighted ave % given subgroup averages
C6I	5	Calculate percentage explained given rates
C6J	24	Standardize percentages for effect of binary confounder (J1, J2, J3)
C6K		Standardize rates for effect of binary confounder
C6L	7	Calculate Percentage & Cases Attributable given standardized rates (L1)
C6M		Calculate Percentage & Cases Attributable given raw rates.
C6N	10	Predicting type of change after standardization
C6O		Identify change conditions in standardized associations
C6P		Which choice of whole gives bigger/smaller ratio?
C6Q		
ID	77	**CHAPTER 7: RANDOMNESS AND CHANCE**
C7A		Calculate Expected Value
C7B	10	Distinguish different types of chance
C7C	10	Identify "uncertain" element for statements of chance
C7D	4	Calculate Number using Capture-Recapture
C7E		Calculate Response to Sensitive Issues
C7F		Calculate Regression to the Mean
C7G	10	Calculate ME, CI & Sample size for Percentages
C7H		Calculate ME, CI and Sample Size for Small Rates
C7I	10	Calculate ME, CI & Sample Size for Averages
C7J	10	Generate CI & Stat. Significance for two proportions
C7K		Generate CI & Stat. Significance for two small rates
C7L	10	Generate CI & Stat. Significance for two averages
C7M		Is difference stat significant difference given ME
C7N		Calculate sample size to make difference stat significant (%)
C7O		Calculate sample size to make difference stat significant (rates)
C7P		Calculate sample size to make difference stat significant (averages)
C7X	13	Generate confounder effect on Stat. Significance for percentages (X1)
C7R		Generate confounder effect on Stat. Significance for small rates
C7S		Generate confounder effect on Stat. Significance for averages
ID	0	**EXTRA**
C0G		
COH		
C02		