

ID	#Total	#Q	STATISTICAL LITERACY MOODLE EXERCISES
96	100	911	Completed, field-tested Moodle exercises as of Sept 2009. T=Thinking Critically
ID	18	170	<b>CHAPTER 1:</b>
C1A	1	10	T: Distinguish observable from unobservable
C1B	1	10	T: Distinguish types of inference
C1C	1	10	T: Distinguish deterministic, probabilistic causation
C1D	1	10	C: Determine if event is repeatable or condition is switchable
C1E	1	10	C: Determine if study is repeatable
C1F	1	10	T: Distinguish Association-Causation in time-independent studies
C1G	1	10	T: Distinguish Association-Causation in time-based studies
C1H	1	10	T: Distinguish Association-causation: Likely/risk/can expect
C1I	1	10	C: Determine effect of confounder on a statistic
C1J	1	10	A: Identify which definition gives a higher count or total
C1K	1	10	A: Calculate effect of grouping on counts
C1L	1	10	T: Distinguish causal phrases
C1N	1	10	C: Distinguish common cause, confounder and mechanism
C1O	1	10	R: Law of Very Large Numbers
C1P	1	5	E: Distinguish major types of error or bias
C1R	1	10	<b>A: Impact of word change on number</b>
C1S	1	10	<b>C: Is this a before/after study?</b>
C1W	1	5	A: Defining groups to increase/decrease number
ID	14	140	<b>CHAPTER 2:</b>
C2A	1	10	Identify appropriate sentence given compare type, test and base
C2B	1	10	Identify type comparison given sentence with test, base and compare grammar
C2C	1	10	Calculate size of comparison given test, base and compare grammar
C2D	1	10	Identify comparison grammar given test, base and size of comparison
C2E	1	10	<b>Compare percentages and numbers with units</b>
C2F	1	10	Identify biggest comparison of two numbers
C2G	1	10	Calculate test or base given opposite and compare.
C2H	1	10	Compare test and base after scaling
C2I	1	10	Calculate effect of definitions on averages
C2J	1	10	Distinguish Longitudinal vs. cross-sectional
C2K	1	10	Distinguish cohort from non-cohort
C2L	1	10	Distinguish Experiment vs. observational
C2M	1	10	Distinguish Controlled vs. uncontrolled
C2P	1	10	Distinguish types of bias
ID	14	120	<b>CHAPTER 3: MEASUREMENTS</b>
C3A	1	5	Calculate & compare ranks from scores
C3C	1	8	Identify which percentile, score or rank is higher
C3D	1	10	Identify which mean is higher in closely related groups
C3E	1	13	Compare averages from extremes of a distribution
C3F	1	5	Calculate weighted average given subgroup averages
C3G	1	10	Calculate mean, median & mode given data values
C3H	1	5	Calculate/compare weighted average before/after standardization
C3I	3	24	Standardize measures for binary confounder
C3J	1	10	Calculate & compare Z-scores
C3K	1	10	Calculate & compare Normalized scores
C3N	1	10	Calculate & compare Effect Sizes
C3O	1	10	Predict outcome given regression & predictor
ID	18	170	<b>CHAPTER 4: DESCRIBING RATIOS</b>
C4A	1	5	Identify part in questions using "What percentage..."
C4B	1	10	Calculate percentages from simple count tables
C4C	1	10	Identify part in percent grammar statements
C4D	1	10	Identify part in percentage grammar statements
C4E	1	10	Convert statements: percentage to percent grammar

C4F	1	10	Convert statement: percent to percentage grammar
C4G	1	5	Identify part in questions using "What is the percentage..."
C4H	1	10	Identify part in statements: percent or percentage grammar
C4I	1	10	Identify part in questions: percent or percentage grammar
C4J	1	20	Calculate percentage from a complex count table
C4N	1	10	Calculate rate per K given numerator and denominator
C4O	1	10	Identify part in phrase-based rate statement
C4P	1	10	Identify equivalent phrase-based rate statement given "Per" ratio
C4Q	1	10	Identify part in clause-based rate statement
C4R	1	5	Translate between phrase-based & clause-based rate grammar
C4S	1	10	Identify part(s) and whole(s) in chance grammar statements
C4T	1	5	Calculate 1 chance in N given numerator and denominator
C4X	1	10	Identify influence of assembly on percentages and rates.
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ID	15	110	<b>CHAPTER 5: COMPARING RATIOS</b>
C5A	1	10	Calculate percentage attributable from percentage/rate data.
C5B	1	5	Calculate cases attributable given rates and # of cases/exposure
C5D	1	10	Percentage-grammar compare: identify common-part and base whole
C5E	1	5	Percentage-grammar compare: identify if common or distinct part
C5G	1	10	Rate-phrase compare statement: identify common part, base whole
C5H	1	5	Rate-phrase compare statement: Determine if common or distinct pa
C5J	1	10	Rate-clause compare statement: identify common part, base whole
C5K	1	5	Rate-clause compare statement: Determine if common or distinct part
C5P	1	10	Likely grammar common-part compare: identify common part and base whole
C5Q	1	5	Likely grammar: Determine if common or distinct part
C5R	1	5	Likely grammar: Identify correct compare given percentage statements
C5S	1	5	Likely grammar: Identify correct compare given rate statements
C5W	1	10	Identify direction given involvement, Bayes compare or data
C5X	1	10	Generate Bayes comparison given rates, charts or row/col tables
C5Y	1	5	Calculate 4th rate given other three
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ID	13	124	<b>CHAPTER 6: INTERPRETING RATIOS</b>
C6A	1	10	Inverse ratios
C6B	1	10	Compare two related three-factor percentages
C6C	1	10	<b>Compare percentages involving same part in related wholes</b>
C6D	1	10	Compare percentages involving same whole, related parts
C6E	1	10	Identify which percentage predicts or explains
C6F	1	14	Calculate prediction and explanation in 2x2 tables
C6G	1	14	Calculate prediction given quality and prevalence
C6I	1	5	Calculate percentage explained given rates
C6J	3	24	Standardize percentages for effect of binary confounder
C6L	1	7	Calculate Percentage & Cases Attributable given standardized rates.
C6N	1	10	Predicting type of change after standardization
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ID	8	77	<b>CHAPTER 7: RANDOMNESS AND CHANCE</b>
C7B	1	10	Distinguish different types of chance
C7C	1	10	Identify "uncertain" element for statements of chance
C7D	1	4	Calculate Number using Capture-Recapture
C7G	1	10	Calculate ME, CI & Sample size for Percentages
C7I	1	10	Calculate ME, CI & Sample Size for Averages
C7J	1	10	Generate CI & Stat. Significance for two proportions
C7L	1	10	Generate CI & Stat. Significance for two averages
C7Q	1	13	Generate confounder effect on Stat. Significance for percentages