WORD: **Bivariate Data**

PAGES:

DEFINITION: **In statistics, data sets using two variables.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Scatter Plot**

PAGES:

DEFINITION: **a bivariate graph with points plotted to show a possible relationship between the two sets of data.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Positive Correlation**

PAGES:

DEFINITION: **two data sets have a positive correlation if both sets of data values increase.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Negative Correlation**

PAGES:

DEFINITION: **two data sets have a negative correlation if one set of data values increase as the other set decreases.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **No Correlation**

PAGES:

DEFINITION: **two data sets have no correlation if there is no relationship between the two sets of values.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Strong Correlation**

PAGES:

DEFINITION: **two data sets that are very strongly related to one another; the correlation coefficient is close to 1 or -1.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Weak Correlation** | PAGES:

DEFINITION: **two data sets that are not strongly related to one another; the correlation coefficient is close to 0.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Correlation Coefficient** | PAGES:

DEFINITION: **The statistical measure of how strongly related two sets of data are; always a value between -1 and +1.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD **Residual** | PAGES:

DEFINITION: **the signed vertical distance between a data point and the line of best fit.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Piecewise Function** | PAGES:

DEFINITION: **A function made up of multiple, different pieces of functions, expressed using domain constraints.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Exponential Function** | PAGES:

DEFINITION: **a function of the form** $f(x) = ab^x$**, where** a **and** b **are real numbers,** $a \neq 0$**,** $b > 0$**, and** $b \neq 1$**.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Exponential Growth** | PAGES:

DEFINITION: **an exponential function of the form** $f(x) = ab^x$ **in which** $b > 1$**.** a **is the initial value and** b **is the growth factor.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Exponential Decay**

PAGES:

DEFINITION: **an exponential function of the form $f(x) = ab^x$ in which $0 < b < 1$. a is the initial value and b is the decay factor.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Average Rate of Change**

PAGES:

DEFINITION: **The straight-line slope between any two points of a function.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Sequence**

PAGES:

DEFINITION: **a list of terms (usually numbers) in a certain order that form a patter.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Arithmetic Sequence**

PAGES:

DEFINITION: **a sequence whose successive terms have a common difference (like a linear function).**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Geometric Sequence**

PAGES:

DEFINITION: **a sequence in which the ratio of successive terms is a constant r, called the common ratio, where $r \neq 0$.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Explicit Sequence**

PAGES:

DEFINITION: **A way to write a sequence, similar to a function, in which the nth term can always be represented and calculated.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Recursive Sequence**

PAGES:

DEFINITION: **A way to write a sequence in which all terms depend on the terms preceding them, the nth term can only be calculated if the n-1 term is known.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Asymptote**

PAGES:

DEFINITION: **a line that a graph gets closer to as the value of a variable becomes extremely large or extremely small.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **System of Linear Equations**

PAGES:

DEFINITION: **a set of multiple linear equations that all relate to the same material and share the same variables.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Elimination Method**

PAGES:

DEFINITION: **a method of solving systems of equations in which one variable is eliminated by adding or subtracting two equations of the system.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Substitution Method**

PAGES:

DEFINITION: **a method used to solve systems of equations for one variable and substituting the resulting expression into the other equation(s).**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Solution to a System of Equations**

PAGES:

DEFINITION: **any ordered pair(s) that satisfies all the equations in a system.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Function Notation**

PAGES:

DEFINITION: **if x is the independent variable and y is the dependent variable, then the function notation for y is $f(x)$, which reads "$f\ of\ x$."**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Solution to a System of Inequalities**

PAGES:

DEFINITION: **any ordered pairs that satisfy all the inequalities in a system.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **Solution Set**

PAGES:

DEFINITION: **the set of values that make a statement true.**

EXAMPLE(S):

COUNTEREXAMPLE(S):

WORD: **System of Linear Inequalities**

PAGES:

DEFINITION: **a system of functions that only include linear inequalities.**

EXAMPLE(S):

COUNTEREXAMPLE(S):