

Equation
<ul style="list-style-type: none"> - slope: Fraction - bracket constant: Fraction - constant: Fraction - answer: Fraction - unknownVariablePlacementCase: int + Equation(String expr)
<ul style="list-style-type: none"> - equationSide(String equation): String - unknownAndBracketCleaner(String expression): String - setUnknownPlacement(String slopeString): void - groupingUnknownTerms(String expr): ArrayList<String> - setSlopeValue(String mxTerm): Fraction - groupingConstantTerms(String expr): ArrayList<String> - setConstantValue(String constantB): Fraction - bracketConstantSubstring(String equaation): String - setBracketConstantValue(String bracketConstantB): Fraction - answerSubstring(String equation): String - setAnswerValue(String answerY): Fraction + getSlope(): Fraction + getBracketConstant(): Fraction + getConstant(): Fraction + getAnswer(): Fraction + getUnknownVariablePlacementCase(): int - setSlope(Fraction slopeM): void - setBracketConstant(Fraction bracketConstantB): void - setConstant(Fraction constantB): void - setAnswer(Fraction answerY): void - setUnknownVariablePlacementCase(int Case): void

EquationCalculator
<ul style="list-style-type: none"> + ANSI_PURPLE: String + ANSI_RESET: String
<ul style="list-style-type: none"> - possibleTermsArray(): ArrayList<String> - bracketScenario(String leftSide, String rightSide, String[] possibleTerms): int - noBracketsScenario(String userInput, String[] possibleTerms): int[] - inputValidator(String userInput): void + EquationSolver(String equationString): Fraction - firstStep(Fraction answer, Fraction slope, Fraction constant): Fraction + main(String[] args): void

Quiz
<ul style="list-style-type: none"> + ANSI_YELLOW: String + ANSI_PURPLE: String + ANSI_RED: String + ANSI_GREEN: String + ANSI_RESET: String - input: Scanner - initialStartingTime: long - elapsedTimeSinceStart: long + Quiz()
<ul style="list-style-type: none"> - randomNumberGenerator(): int - addOrSubtract(): String - answerVerifier(ArrayList<String> equations, int questionNum): String - elapsedTime(): void - messageOutput(String userInputResult, int correctAnswers): int - finalOutputMessage(int correctAnswer, int totalQuestions): void - oneStepEquations(): void - twoStepEquations(): void - multiStepEquations(): void