



Graphy Application Reference Guide

Graphy is an Android Application written by Shane Taylor and developed by Shane Taylor, Daniel Fitch, Itzel Ruiz, Joseph Hibdon, and Rachel Adler, all of Northeastern Illinois University. Graphy reinforces the basics of the cartesian plane and properties of triangles through interactive screens that present problems to users for solving.

Main Menu – From the main menu screen, the user can click an image to jump directly to any of the six activities.

Truth Tables – The truth table screen is a brief introduction to formal logic and truth tables with a “If P then Q” table and related text example.

Point Graph button - takes user to the point graph.

Main Menu button – takes the user back to the main menu.

Point Graph – This graph first asks the user to plot the randomly generated blue point’s reflection across the Y axis. Once successful, it then prompts the user to do the same across the X axis.

Plot button – plots the user's coordinates on the graph and evaluates.

Reset Graph button – removes any user generated points and generates a new random point.

Line Graph button - takes user to the line graph.

Menu button – takes the user back to the main menu.

Line Graph – This graph first asks the user to plot a line parallel to the randomly generated blue line. Once successful, it then prompts the user to plot a perpendicular line.

Plot button – plots the user's coordinates on the graph and evaluates.

Reset Graph button – removes any user generated lines and generates a new random line.

Reflexive Graph button - takes user to the reflexive triangles graph.

Menu button – takes the user back to the main menu.

Reflexive Triangles Graph – This graph first asks the user to plot a triangle in quadrant II that is reflexive of the randomly generated triangle in quadrant I. The lines are color coded to match the user's input. After a successful input, it then asks the user to do the same in quadrant III and then in quadrant IV.

Plot button – plots the user's coordinates on the graph and evaluates.

Reset Graph button – removes any user generated lines and generates a new random triangle.

Similar Triangles button - takes user to the similar triangles graph.

Menu button – takes the user back to the main menu.

Similar Triangles – The graph first asks the user to create a similar triangle to the randomly generated one, given the lengths of the three sides (SSS). After a successful input, it then asks the user to create a similar triangle given two lengths and the angle between them (SAS). The angle displayed is in decimal format and produced using the following formula:

Submit button – evaluates user input.

Reset Graph button – removes any user input and generates a new random triangle.

Pythagorean Theorem button - takes user to the Pythagorean Theorem graph.

Menu button – takes the user back to the main menu.

Pythagorean Theorem – The graph generates a random right triangle, gives the user the lengths of sides A and B, and asks the user for the length of side C.

Submit button – evaluates user input.

Reset Graph button – removes any user input and generates a new random triangle.

Menu button – takes the user back to the main menu.

For support or bug issues, please email Graphy Support at 43ec53f2@opayq.com.

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