Algebra vs The Cockroaches

Purpose: The learner will practice writing linear functions in slope-intercept form

Grade Level/TEKS Reference: Algebra I

A.3(B) calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems

A.3(C) graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems

Length of time necessary for game or activity: This game can be played for as little as 5 mins (hook for whole class), or as long as 25 minutes. It has progressive levels, so it does not suffer from redundancy.

Number of Participants: This game can be played as a single player game, or used on an interactive white board with the whole class.

Source for Game or Activity: https://games.forkids.education/algebra-vs-the-cockroaches/

Procedure: The object of the game is to write the equation of a line, in slope-intercept form before cockroaches take over. The line is formed by the path of the first cockroach. The player is encouraged to find the y-intercept first, then guided through rise/run to find the rate of change (slope) The game is leveled, starting with very basic, horizontal lines. This will help build conceptual knowledge and confidence.

Adapted by: Keli Hinojosa (2020)