## Slope Racer

The game of Slope Racer is a good game for learning or reviewing the slope of a line. The game is played by two players (or teams) on a race track made out of graph paper. Players alternate taking turns. The object of the game is to be the first one to pass the finish line without crashing. Unfortunately, I rarely had students finish the game because their initial moves were too large causing them to crash.

One player goes first and can start at any point on the starting line. That player must choose a horizontal distance, vertical distance, and then give the slope of the line. She then draws the line from the starting point that she chose to the new point. Player 2 then does the same thing.

Now, Player 1 must select new horizontal and vertical distances with this condition: the number chosen for each must be within ONE unit of what they selected on their previous move. For example, if Player 1 had selected $x=3$ and $y=0$ on her first move, then her $x$ distance on her second move must be 2,3 , or 4 , and her $y$ distance must be 0,1 , or -1 . Play alternates between the two players until one of them crosses the finish line or both of them crash. A crash occurs when the numbers picked take the person out of bounds (i.e., off the graph paper).

Have your students fill out a chart showing their moves and slope:

Player 1

| Horizontal | Vertical | Slope |
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Player 2

| Horizontal | Vertical | Slope |
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