Hit the Slopes

# Sketching a Graph

* *Work together in partners. One partner is the storyteller, and the other partner is the sketcher.*
* *Work together to create a set of horizontal and vertical axes using the graphing paper provided.* 
  + *The horizontal axis should have 50-meter increments that reaches at least 400 meters. This is the distance.*
  + *The vertical axis should have increments of 5 km/h that reaches at least 25 km/h. This is the speed.*
* *Once the axes of the graph have been constructed, the storyteller can read the passage from below. While the storyteller is reading, the sketcher should be sketching a graph that represents the story.*
* *Make sure the storyteller gives the sketcher plenty of time.*
* *The graph should reflect the story you will read.*
* *Every time the steepness of the graph changes, calculate the slope.*
* *Once the graph is complete, compare the graph with that of a another partnership.*

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**Marc’s Skiing Adventure**

Marc was skiing down a big mountain. For the first 50 meters, he steadily worked up to a speed of 15 km/h.

For the next 100 meters, Marc consistently sped up to 25 km/h.

All of a sudden, he was going so fast that ran into a tree.

For the next 50 meters, he was so nervous that he consistently sped up to only 10 km/h.

For the next 50 meters, Marc steadily increased his speed to 15 km/h. He stayed at that speed for 100 meters.

Marc finally reached the bottom of the mountain and gradually came to a stop, without the help of any trees, which took him 50 meters.

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