Overall Expectations:

KIV.02 investigate, in qualitative and quantitative terms, uniform and non-uniform linear motion, and solve related problems;

KIV.03 demonstrate an understanding of uniform and non-uniform linear motion, in one and two dimensions.

Specific Expectations:

KI2.02 analyse and interpret position-time, velocity-time, and acceleration-time graphs of motion in one dimension (e.g., use tangent slopes to create velocity-time graphs from position-time graphs and acceleration-time graphs from velocity-time graphs; use the area under the curve to create position-time graphs from velocity-time graphs and velocity-time graphs from acceleration-time graphs) [AI, C];

KI2.07 solve problems involving uniform and non-uniform linear motion in one and two dimensions, using graphical analysis and algebraic equations [AI, C];

KI3.01 distinguish between the terms constant, instantaneous, and average with reference to speed, velocity, and acceleration, and provide examples to illustrate each term.