Common issues:	Suggested questions and prompts:
Student interprets the graph as a picture For example: The student assumes that as the graph goes up and down, Tom's path is going up and down. Or: The student assumes that a straight line on a graph means that the motion is along a straight path. Or: The student thinks the negative slope means Tom has taken a detour.	• If a person walked in a circle around their home, what would the graph look like? • If a person walked at a steady speed up and down a hill, directly away from home, what would the graph look like? • In each section of his journey, is Tom's speed steady or is it changing? How do you know? • How can you figure out Tom's speed in each section of the journey?
Student interprets graph as speed–time The student has interpreted a positive slope as speeding up and a negative slope as slowing down.	• If a person walked for a mile at a steady speed, away from home, then turned round and walked back home at the same steady speed, what would the graph look like? • How does the distance change during the second section of Tom's journey? What does this mean? • How does the distance change during the last section of Tom's journey? What does this mean? • How can you tell if Tom is traveling away from or towards home?
Student fails to mention distance or time For example: The student has not mentioned how far away from home Tom has traveled at the end of each section. Or: The student has not mentioned the time for each section of the journey.	• Can you provide more information about how far Tom has traveled during different sections of his journey? • Can you provide more information about how much time Tom takes during different sections of his journey?
Student fails to calculate and represent speed For example: The student has not worked out the speed of some/all sections of the journey. Or: The student has written the speed for a section as the distance covered in the time taken, such as "20 meters in 10 seconds."	• Can you provide information about Tom's speed for all sections of his journey? • Can you write his speed as meters per second?
Student misinterprets the scale For example: When working out the distance the student has incorrectly interpreted the vertical scale as going up in 10s rather than 20s.	• What is the scale on the vertical axis?
Student adds little explanation as to why the graph is or is not realistic	• What is the total distance Tom covers? Is this realistic for the time taken? Why?/Why not? • Is Tom's fastest speed realistic? Is Tom's slowest speed realistic? Why?/Why not?