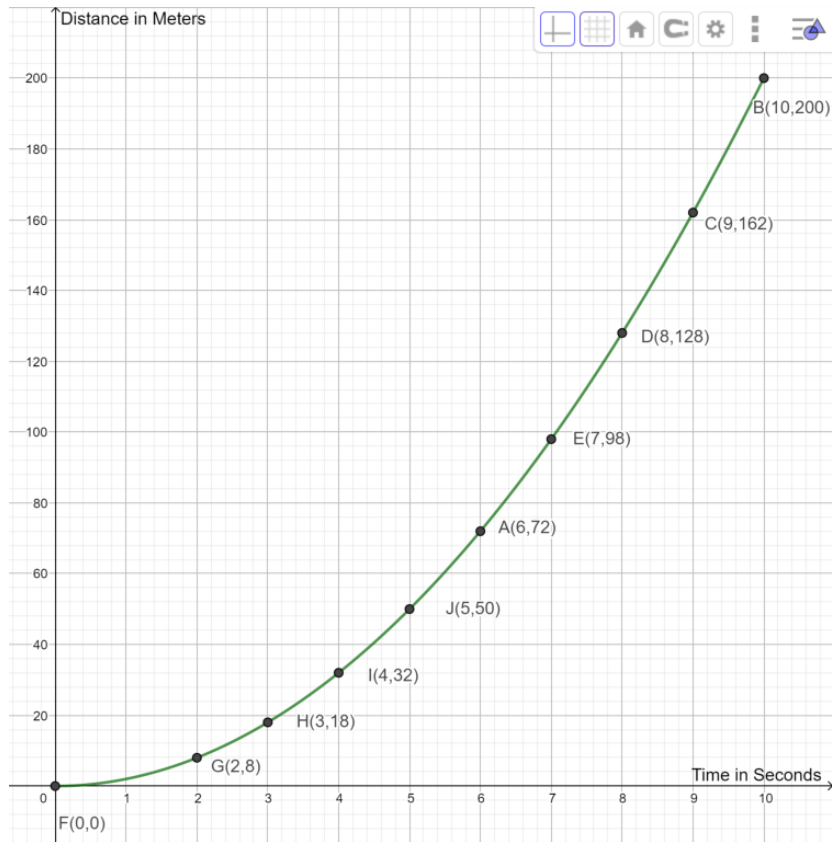


Task 1: Estimating Instantaneous rate of change.

Below is a distance time graph for the first ten seconds of a warmup cycle by Olympic gold medallist Victoria Pendleton



- Using your graph or otherwise find what Victoria Pendleton's average speed was over these 10 seconds?
- Victoria's coach wants to know what her speed is at exactly 6 seconds. To help answer this fill in the following table.

Average speed between A and B =		Average speed between A and G =	
Average speed between A and C =		Average speed between A and H =	
Average speed between A and D =		Average speed between A and I =	
Average speed between A and E =		Average speed between A and J =	

- The slope of which secant is the nearest estimate to Victoria's speed after exactly 6 seconds?
- How might you find a better estimate for Victoria's speed at 6 seconds?