**Unit 2 Review**

**Individual White Boards**

1. Look at the velocity v. time graph on the board. Sketch the position v time and acceleration v. time graph of the same object.
2. Given v(t) = 6t2 + 7t – 2, Find x(2), v(2), and a(2).
3. Write down the 3 kinematic equations.
4. Find the resultant vector at t = 3s if r = (2t2 – 8t) **i** + 5t**j**
5. A high diver pushes off horizontally with a speed of 2 m/s from the platform edge 10 m above the surface of the water. At what horizontal distance from the edge is the diver 0.8 s after pushing off? At what vertical distance above the surface of the water is the diver at 0.8 s? At what horizontal distance from the edge does the diver strike the water?
6. What is the formula for centripetal acceleration?