## 11th August

## Higher Plus 5-a-day



Velocity (m/s) 14 12 10 8 6 4 2 0 0 1 2 3 4 5 6 Time (seconds)

Work out an estimate for the distance travelled over 6 seconds. Use 3 strips of equal width.

Here is a velocity-time graph for 6 seconds of a journey.

Make h the subject of

$$\sqrt{\frac{r+h}{4rh}} = V$$

Find the equation of the line that is perpendicular to 2x + 3y = 4 and passes through the point (9, 0)

Solve

$$8^{4x+1} - 16^{x-1} = 0$$