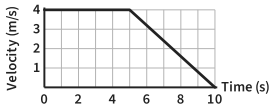
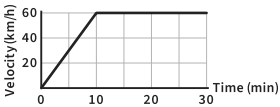
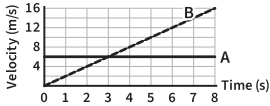
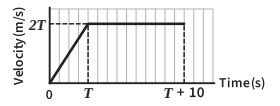
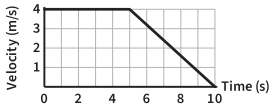
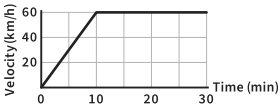
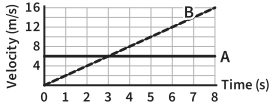
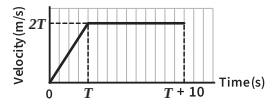


a Find the area enclosed by $y = x + 2$, the x axis and $x = 4$ <u>18</u> an area that starts at a root	b Find the average speed  <u>3 m/s</u> an average speed that starts moving	c Find the distance in km  <u>25 km</u> an area with mixed units	d The area under $y = x + c$ from $x = 0$ to $x = 6$ is 30. Find c. <u>$C = 2$</u> working back to an intercept
e Use 4 strips to estimate the area under $y = x^2$ from $x = 0$ to $x = 2$ <u>2.75</u> strips of width one half	f Use 4 strips to estimate the area between $y = -x^2 + 4x$ and the x axis <u>10</u> the limits from the roots	g Explain why the trapezium rule gives the exact area under $y = 3x + 1$ <u>the graph is straight</u> exact: the graph is a straight line	h $y = \sqrt{16 - x^2}$. Find an exact 2 strip estimate of the area from 0 to 4. <u>$4 + 4\sqrt{3}$</u> a trapezium estimate in surds
i $y = 2^x$. Is a 4 strip estimate of the area from 0 to 2 less than a 2 strip one? <u>yes</u> more strips on a curve that bends up	j When has B gone as far as A?  <u>6 s</u> equal areas under two graphs	k The distance is 96 m. Find T.  <u>$T = 4$</u> an area that gives a quadratic	l Use 4 strips to estimate the area between $y = x^2$ and $y = 4$ <u>10</u> the area between a curve and a line

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