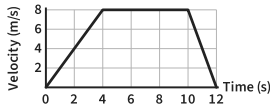
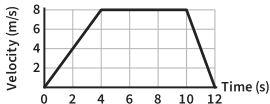
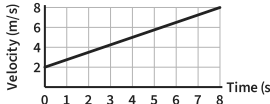
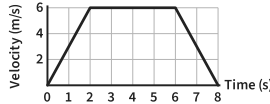
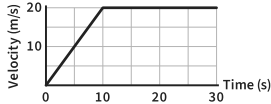
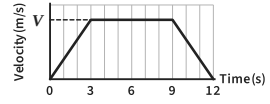
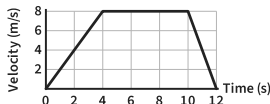
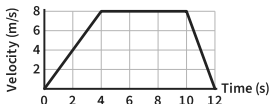
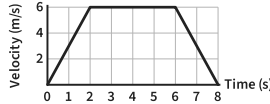
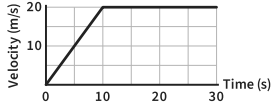
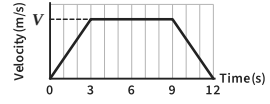


|                                                                                                                                                                                                          |                                                                                                                                                                                                                 |                                                                                                                                                                                                               |                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>a</b> Find the acceleration up to 4 s</p>  <p><math>2 \text{ m/s}^2</math></p> <p>one stage of a journey</p>      | <p><b>b</b> Find the deceleration after 10 s</p>  <p><math>4 \text{ m/s}^2</math></p> <p>deceleration as a positive number</p> | <p><b>c</b> Find the acceleration</p>  <p><math>0.75 \text{ m/s}^2</math></p> <p>an acceleration that is not whole</p>      | <p><b>d</b> Find the distance from 2 to 6 s</p>  <p><math>24 \text{ m}</math></p> <p>an area that starts after zero</p> |
| <p><b>e</b> Find the area under <math>y = 2x + 1</math> from <math>x = 0</math> to <math>x = 3</math></p> <p><math>12</math></p> <p>the area under a line from its equation</p>                          | <p><b>f</b> Find the area enclosed by <math>y = 2x</math>, <math>y = 8 - 2x</math> and the <math>x</math> axis</p> <p><math>8</math></p> <p>the area between two lines and an axis</p>                          | <p><b>g</b> Find the average speed over 8 s</p>  <p><math>4.5 \text{ m/s}</math></p> <p>the average speed from the area</p> | <p><b>h</b> Find the total distance</p>  <p><math>500 \text{ m}</math></p> <p>an area on scaled axes</p>                |
| <p><b>i</b> The distance is 72 m. Find <math>V</math>.</p>  <p><math>V = 8</math></p> <p>working back to a velocity</p> | <p><b>j</b> A straight line from <math>(0, 0)</math> to <math>(T, 12)</math> has gradient 3. Find the area under it.</p> <p><math>24</math></p> <p>a gradient back to a time, then an area</p>                  | <p><b>k</b> Estimate the area under <math>y = x^2 + 1</math> from <math>x = 0</math> to <math>x = 2</math> with 2 strips</p> <p><math>5</math></p> <p>trapezia from an equation</p>                           | <p><b>l</b> Estimate the area under <math>y = \frac{12}{x}</math> from <math>x = 1</math> to <math>x = 5</math> with 4 strips</p> <p><math>20.2</math></p> <p>four strips: inner heights count twice</p>   |

|                                                                                                                                                                                                            |                                                                                                                                                                                                                   |                                                                                                                                                                                                                 |                                                                                                                                                                                                              |
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