## Displacement/Time Graphs - www.m4ths.com

(1) A particle travels along the $x$ axis and a graph of its motion is shown below.
(a) Explain why the speed is constant in the first section of travel
(b) Explain what happens to the particle between 2 and 8 seconds
(c) Find the velocity of the $3^{\text {rd }}$ section of travel
(d) State the speed of the $3^{\text {rd }}$ section of the travel
(e) Find the total distance covered by the particle
(f) Find the totals displacement of the particle
$\mathrm{s}(\mathrm{m})$

(2) A particle travels along the $x$ axis
(a) State how far from the origin the particle starts
(b) State the direction of travel for the first 7 seconds
(c) Find the velocity of the first section of travel
(d) Find the total distance travelled by the particle
(e) Find the totals displacement of the particle
(f) Which section was the fastest section for the particle?
$d(m)$


