## TRANSFORMING GRAPHS OF MOTION

The middle graph below shows the velocity of a hypothetical object moving along a straight line.

1. What can we say about the motion of this object?
2. Plot the corresponding graph of acceleration as a function of time.
3. Plot the corresponding graph of displacement as a function of time.




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Still going forward, but the Stili going forward, but the
speed is no longer increasing.
Whatever this thing is, it's already moving forward.
velocity $(\mathrm{m} / \mathrm{s})$


The speed of the object is decreasing uniformly. It's still moving forward.
(1) Here we see it moving forward and accelerating forward uniformly.

Nope, it stopped; this time for a few seconds.

Moving backward, but slowing down. It might reverse direction again.

Still moving backward, but the speed stays constant


