DESCRIBING THE MOTION OF AN OBJECT.

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(i) Describe the motion at t = 1 sec

(ii) Describe the motion at t = 6 sec

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 $H = 40t - 5t^2 = 35m$ The object is 35m above the ground v = 40 - 10t = 30 m/s The object is travelling at 30 m/s upwards a = -10 m/s/s. The object is decelerating at 10 m/s every second

(ii) Describe the motion at t = 6 sec.
H = 40t - 5t² = 60m The object is 60m above the ground
v = 40 - 10t = -20 m/s The object is travelling at 20 m/s downwards
a = -10 m/s/s . The object is accelerating down at 10 m/s every second (or you could say "decelerating upwards")