## King Fahd University of Petroleum and Minerals Math. & Stat. Department 161-Math 101 Quiz (4)

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Q1) A particle is moving with a position function  $s(t) = t^3 - t^2 + t + 1$ . At which time its velocity is equal to 9?

Q2) Sand falls from a converyor belt at a rate of  $10m^3$  / min on the top of the Conical pile. The height of the pile is always three-eigths of the base diameter. How fast is the height changing when the pile is 4 m high?