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## Quiz 7

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- (a) Does every reversible process coincide with a quasi-static locus? Does every quasi-static locus coincide with a reversible process? For any real process starting in a state A and terminating in a state H, does there exist some quasi-static locus with the same two terminal states A and H? Does there exist some reversible process with the same two terminal states? Justify your answers briefly. [5]

- (b) Show that if two bodies have equal heat capacities, each of which is constant (independent of temperature), the equilibrium temperature achieved by direct thermal contact is the arithmetic average of the initial temperatures. [5]