

**Answer on Question#38655 - <Math> - <Other>.**

Which of the following problems is decidable?

- a. whether a turing machine has at least three states
- b. whether a turing machine will ever halt
- c. whether a turing machine will ever print a symbol
- d. whether a turing machine will ever enter a designated state

**Solution.** a) This problem can be decidable, but there are insufficient conditions.

b) If a turing machine has been halted, it means that problem is decidable

c,d) If a turing machine will ever print a symbol or enter a designated state, then it never halts.

**Answer: b) whether a turing machine will ever halt**