$\mathcal{P}$

$\mathcal{P}$ is the set of decision problems that can be solved in polynomial time.
Which of these decision problems are in $\mathcal{P}$?

- 2-colorability (Can the input graph be vertex-colored with red and blue, so that no edge connects vertices of the same color?)
- 3-colorability (Can the input graph be vertex-colored with red, blue, and green, so that no edge connects vertices of the same color?)
- 2-SAT (Is the input 2CNF formula satisfiable?)
- 3-SAT (Is the input 3CNF formula satisfiable?)
- Hamiltonian Graph (Does the input graph have a cycle that visits every vertex exactly once?)
- Eulerian Graph (Does the input graph have a cycle that visits every edge exactly once?)