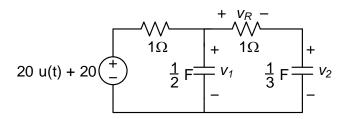
You have a large selection of collaborative problems, homework problems, and solved problems in your text already that are at the level of difficulty of the test. When you are ready for a challenge, here are three problems at a difficulty level slightly greater than that of the test.

P1 Concept: Initial Conditions

Find: $v_R(0^+)$ and $v_R'(0^+)$ in the following circuit

Hints: RCC initial conditions are solved the same way as LRC, except that

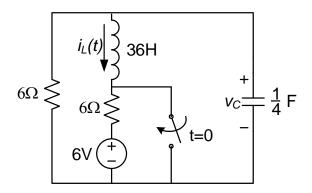
instead of finding $v_c(0)$ and $i_L(0)$ first you'll find $v_{c1}(0)$ and $v_{c2}(0)$.



P2 Concept: Find i (parallel) or v (series) of an RLC circuit

Find: Find $v_C(t)$ in the following RLC circuit for $t \ge 0$.

Hints: There are several 3's in the answer



P3 Concept: Find any i or v in an RLC circuit

Find: Find $v_C(t)$ in the following RLC circuit for $t \ge 0$.

Hints: One root of s is -5, and there is a 117 in the answer

