Given variable \( p \colon [n^2, \bot; (n-2)^2, \bot] \), the following program is the sieve of Eratosthenes for determining if a number is prime.

\[
\text{for } i := 2; \text{ceil}(n^{1/2}) \text{ do if } p \text{ then for } j := i; \text{ceil}(n/i) \text{ do } p := (j \times i) \rightarrow \bot \text{ | } p \text{ od else ok fi od}
\]

(a) Show how the program can be transformed for concurrency. State your answer by drawing the execution pattern.

(b) What is the execution time, as a function of \( n \), with maximum concurrency?