Let \( a \) and \( b \) be rational variables. Define procedure \( P \) as
\[
P = \langle x, y : \text{rat} \ if \ x=0 \ \textbf{then} \ a := x \ \textbf{else} \ a := x \times y. \ a := a \times y \ \textbf{fi} \rangle
\]
(a) What is the exact precondition for \( a' = b' \) to be refined by \( P \ a (1/b) \)?
(b) Discuss the difference between “eager” and “lazy” evaluation of arguments as they affect both the theory of programming and programming language implementation.

§ see “a Theory of Lazy Imperative Timing”