

94. Let T_1 be the time between a car accident and reporting a claim to the insurance company. Let T_2 be the time between the report of the claim and payment of the claim. The joint density function of T_1 and T_2 , $f(t_1, t_2)$, is constant over the region $0 < t_1 < 6$, $0 < t_2 < 6$, $t_1 + t_2 < 10$, and zero otherwise.

Determine $E[T_1 + T_2]$, the expected time between a car accident and payment of the claim.

- (A) 4.9
- (B) 5.0
- (C) 5.7
- (D) 6.0
- (E) 6.7