

55. An insurance company's monthly claims are modeled by a continuous, positive random variable X , whose probability density function is proportional to $(1 + x)^{-4}$, where $0 < x < \infty$.

Determine the company's expected monthly claims.

- (A) $\frac{1}{6}$
- (B) $\frac{1}{3}$
- (C) $\frac{1}{2}$
- (D) 1
- (E) 3