

75. The monthly profit of Company I can be modeled by a continuous random variable with density function f . Company II has a monthly profit that is twice that of Company I.

Determine the probability density function of the monthly profit of Company II.

(A) $\frac{1}{2}f\left(\frac{x}{2}\right)$

(B) $f\left(\frac{x}{2}\right)$

(C) $2f\left(\frac{x}{2}\right)$

(D) $2f(x)$

(E) $2f(2x)$