

74. Let  $T$  denote the time in minutes for a customer service representative to respond to 10 telephone inquiries.  $T$  is uniformly distributed on the interval with endpoints 8 minutes and 12 minutes. Let  $R$  denote the average rate, in customers per minute, at which the representative responds to inquiries.

Which of the following is the density function of the random variable  $R$  on the interval

$$\left(\frac{10}{12} \leq r \leq \frac{10}{8}\right)?$$

(A)  $\frac{12}{5}$

(B)  $3 - \frac{5}{2r}$

(C)  $3r - \frac{5 \ln(r)}{2}$