

D. The fraction of the interval $0 \leq x \leq 2\pi$, for which one (or both) of the inequalities

$$\sin x \geq \frac{1}{2}, \quad \sin 2x \geq \frac{1}{2}$$

is true, equals

- (a) $\frac{1}{3}$, (b) $\frac{13}{24}$, (c) $\frac{7}{12}$, (d) $\frac{5}{8}$.