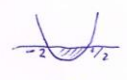


2.13
5

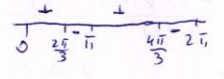
$$\begin{cases} \cos 2x + 3 \cos x < 1 \\ \sin 2x + \sin x > 0 \end{cases}$$

$$\begin{cases} 2 \cos^2 x + 3 \cos x - 2 < 0 \\ \sin x (2 \cos x + 1) > 0 \end{cases} \rightarrow \begin{cases} \sin x = 0 \\ \cos x = -\frac{1}{2} \end{cases}$$



$$-2 < \cos x < \frac{1}{2} \rightarrow -1 < \cos x < \frac{1}{2}$$

$$\begin{cases} \frac{\pi}{3} < x < \frac{2\pi}{3} \\ \frac{\pi}{2} < x < \frac{5\pi}{3} \end{cases}$$



$$\begin{cases} 0 < x < \frac{2\pi}{3} \\ \pi < x < \frac{4\pi}{3} \end{cases}$$

$$\begin{cases} \frac{\pi}{3} < x < \frac{\pi}{2} \\ \pi < x < \frac{4\pi}{3} \end{cases}$$

2.15

$$11.3 \dots 2 \sin^2 a \sqrt{a^2}$$