

2.23  
2

$$3 \cot x - 2 \sin x \leq 0$$

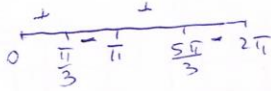
$$x \in \pi k$$

$$\frac{3 \cot x - 2 \sin^2 x}{\sin x} \leq 0$$

$$x = \pi k$$

$$3 \cot x - 2(1 - \cot^2 x) = 0$$
$$2 \cot^2 x + 3 \cot x - 2 = 0$$

$$x = \pm \frac{\pi}{3} + 2\pi k$$



$$\frac{\pi}{3} \leq x < \pi$$
$$\frac{5\pi}{3} \leq x < 2\pi$$