

4.22  
p 4

$$\cos 5x - \sin\left(3x - \frac{\pi}{2}\right) \geq 2\cos(4x + 3\pi)$$

$$\cos 5x + \cos 3x \geq -2\cos 4x$$

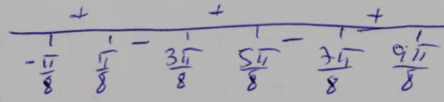
$$2\cos 4x \cos x + 2\cos 4x \geq 0$$

$$2\cos 4x(\cos x + 1) \geq 0$$

$$\downarrow$$
$$4x = \frac{\pi}{2} + 4k$$

$$x = \frac{\pi}{8} + \frac{\pi}{2}k$$

↓  
'k 3/4  
'1/2



$$-\frac{\pi}{8} + \frac{\pi}{2}k < x < \frac{\pi}{8} + \frac{\pi}{2}k$$