

Решите неравенства:

1) $\sin\left(x - \frac{3\pi}{4}\right) \geq 0$

2) $\cos\left(2x - \frac{\pi}{4}\right) < 0$

3) $\sin\left(\frac{\pi}{7} + 3x\right) \leq -1$

4) $2\cos\left(\frac{\pi}{6} - 2x\right) - 1 < 0$

5) $\sin x \cos \frac{x}{2} + \cos x \sin \frac{x}{2} \geq \frac{1}{2}$

6) $\cos^2 3x - \sin^2 3x \leq \frac{\sqrt{3}}{2}$

7) $\cos\left(\frac{2\pi}{3} - 4x\right) + \cos\left(\frac{2\pi}{3} + 4x\right) - \frac{1}{2} \leq 0$

8) $\sin x + \cos x < \sqrt{2}$