

$$1) \frac{\pi}{4} + 2\pi n < x - \frac{\pi}{3} < \frac{7\pi}{4} + 2\pi n$$

$$\frac{7\pi}{12} + 2\pi n < x < \frac{25\pi}{12} + 2\pi n$$

$$2) \frac{\pi}{4} + \pi n < 4x - \frac{\pi}{4} < \frac{\pi}{2} + \pi n$$

$$\frac{\pi}{2} + \pi n < 4x < \frac{3\pi}{4} + \pi n$$

$$\frac{\pi}{8} + \frac{\pi n}{4} < x < \frac{3\pi}{16} + \frac{\pi n}{4}$$

$$3) -\frac{\pi}{4} + \pi n < \frac{x}{12} + \frac{\pi}{16} < 0 + \pi n$$

$$-\frac{5\pi}{16} + \pi n < \frac{x}{12} < -\frac{\pi}{16} + \pi n$$

$$-\frac{15\pi}{4} + 12\pi n < x < -\frac{3\pi}{4} + 12\pi n$$