

108.

$$\frac{16}{9} = (1 + \frac{16}{9}) \sin^2 x$$

$$\frac{16}{9} = \frac{25}{9} \sin^2 x$$

$$\sin^2 x = \frac{16}{25}$$

$$\sin x = \pm \frac{4}{5}$$

$$\begin{aligned} \cos x &= \pm \sqrt{1 - \sin^2 x} \\ &= \pm \sqrt{1 - \frac{16}{25}} \\ &= \pm \sqrt{\frac{9}{25}} \end{aligned}$$

$$\cos x = \pm \frac{3}{5}$$

tjsho x :

$$\frac{\sin x}{\cos x} = \frac{4}{3}$$

$$\frac{4}{3} = \frac{\pm \frac{4}{5}}{\pm \frac{3}{5}}$$

$$\Rightarrow \begin{array}{|l} \sin x = \frac{4}{5}, \cos x = \frac{3}{5} \\ \sin x = -\frac{4}{5}, \cos x = -\frac{3}{5} \end{array}$$

$$\text{Je } \frac{\sin x}{\cos x} = -\frac{3}{4}$$

Entes

$$\frac{\sin x}{\cos x} = \frac{\sin x}{\cos x}$$

$$-\frac{3}{4} = \frac{\sin x}{\pm \sqrt{1 - \sin^2 x}}$$

$$\frac{9}{16} = \frac{\sin^2 x}{1 - \sin^2 x}$$

$$9 - 9 \sin^2 x = 16 \sin^2 x$$

$$9 = 25 \sin^2 x$$

$$\| \sin x = \pm \frac{3}{5} \|$$

$$\cos x = \pm \sqrt{1 - \sin^2 x}$$

$$= \pm \sqrt{1 - \frac{9}{25}}$$

$$\| \cos x = \pm \frac{4}{5} \|$$

$$\frac{\sin x}{\cos x} = \frac{\sin x}{\cos x}$$

$$-\frac{3}{4} = \frac{\pm \frac{3}{5}}{\pm \frac{4}{5}}$$

$$\begin{array}{|l} \sin x = \frac{3}{5}, \cos x = -\frac{4}{5} \\ \sin x = -\frac{3}{5}, \cos x = \frac{4}{5} \end{array}$$