

$$2.41 \text{ (c)} \quad \cos^2 x = a^2 \sin^2 x (g^2 x + 2g^2 x)^2 / \sqrt{\dots}$$

$$\pm \sin x = a \sin x (4g^2 x - 1) \quad /: \sin x \neq 0$$

$$\pm 1 = a(4g^2 x - 1)$$

$$\frac{\pm 1}{a} + 1 = 4g^2 x$$

$$g^2 x = \frac{a \pm 1}{4a} \rightarrow g x = \pm \sqrt{\frac{a \pm 1}{4a}}$$

(7)

$$-1 \leq \cos x \leq 1$$

$$-1 \leq \pm \sqrt{\frac{a \pm 1}{4a}} \leq 1$$

$$0 \leq \frac{a \pm 1}{4a} \leq 1$$

$$a \pm 1 \leq 4a$$

$$-\frac{1}{3} \leq a, \quad \frac{1}{3} \leq a$$

2.13)

$$a \pm 1 \geq 0$$

$$a \geq 1 \quad \text{or} \quad a \geq -$$

$$\boxed{a \geq \frac{1}{3}}$$

or

$$\boxed{a \geq \frac{1}{3}}$$

$$\begin{array}{l} \leftarrow a \geq \frac{1}{3} \quad \text{or} \quad a \geq -1 \quad + \quad \frac{1}{3} \\ a \geq -\frac{1}{3} \quad \text{or} \quad \boxed{a \geq 1} \quad - \end{array}$$