

11.

$$4 \cos^2 A - 1 = 0$$

$$4p^2 - 1 = 0$$

$$(2p+1)(2p-1) = 0$$

DOTS

$$(2 \cos A + 1)(2 \cos A - 1) = 0$$

$$2 \cos A + 1 = 0 \quad 2 \cos A - 1 = 0$$

$$2 \cos A = -1 \quad 2 \cos A = 1$$

$$\cos A = -\frac{1}{2} \quad \cos A = \frac{1}{2}$$

$$\theta = \frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$$

12.
$$2 \sin^2 A - 3 \sin A + 1 = 0$$

$$(2 \sin A - 1)(\sin A - 1) = 0$$

$$2 \sin A - 1 = 0 \quad \sin A - 1 = 0$$

$$2 \sin A = 1 \quad \sin A = 1$$

$$\sin A = \frac{1}{2}$$

$$2p^2 - 3p + 1$$

$$(2p-1)(p-1)$$

KEY #

$$\theta = \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}$$

13.
$$2 - 2 \cos^2 A + \sin A = 1$$

$$2 - 2(1 - \sin^2 A) + \sin A = 1$$

$$2 - 2 + 2 \sin^2 A + \sin A = 1$$

$$2 \sin^2 A + \sin A - 1 = 0$$

$$(2 \sin A - 1)(\sin A + 1) = 0$$

$$2 \sin A - 1 = 0 \quad \sin A + 1 = 0$$

$$2 \sin A = 1$$

$$\sin A = \frac{1}{2}$$

$$\sin A = -1$$

RECALL

$$\cos^2 A + \sin^2 A = 1$$

$$\cos^2 A = 1 - \sin^2 A$$

$$2p^2 + p - 1$$

$$(2p-1)(p+1)$$

$$\theta = \frac{\pi}{6}, \frac{5\pi}{6}, \frac{3\pi}{2}$$