By Euler's formula:

$$e^{i\theta} = cos(\theta) + i\sin(\theta)$$
$$e^{-i\theta} = cos(\theta) - i\sin(\theta)$$

$$\therefore \cos(\theta) = \frac{e^{i\theta} + e^{-i\theta}}{2}$$

$$\text{let} \cos(\theta) = x$$
$$2x = e^{i\theta} + e^{-i\theta}$$
$$2xe^{i\theta} = (e^{i\theta})^2 + 1$$
$$(e^{i\theta})^2 + (-2x)e^{i\theta} + 1 = 0$$

$$e^{i\theta} = \frac{-(-2x) \pm \sqrt{(-2x)^2 - 4}}{2} = x \pm \sqrt{x^2 - 1}$$
$$i\theta = \ln(x \pm \sqrt{x^2 - 1})$$
$$\theta = -i\ln(x \pm \sqrt{x^2 - 1})$$

$$\therefore \arccos(\theta) = -i\ln(\theta \pm \sqrt{\theta^2 - 1})$$