Solving Trigonometric Equations with Multiple Angles

Question	Substitute $x = \cdots$	Rearrange Equation	Acute Angle	Range for x	Unit Circle	Solutions for <i>x</i>	Solutions for θ
Solve $7\cos(2\theta) = 5$ for $0^{\circ} \le \theta < 180^{\circ}$	$x = 2\theta$ $7\cos x = 5$	$\cos x = \frac{5}{7}$	$x = \cos^{-1}\left(\frac{5}{7}\right)$ $x = 44.415^{\circ}$	0° ≤ <i>x</i> < 360°			
Solve $8\sin(3\theta) - 7 = 0$ for $-90^{\circ} \le \theta < 90^{\circ}$	$x = 3\theta$ $8\sin x - 7 = 0$						
Solve $\frac{4}{\tan(\theta + 25)} = 3$ for $-180^{\circ} \le \theta < 180^{\circ}$							
$9\cos(2\theta - 15) = 4$ for $0^{\circ} \le \theta < 360^{\circ}$							
$\frac{\tan(3\theta + 70)}{2} + 3 = 0$ for $-90^{\circ} \le \theta < 90^{\circ}$							