

## MATH 195: SOLVING TRIG EQUATIONS PRACTICE

Solve the following equations. Find the general solution.

(1)  $\sin x = \cos x$

(2)  $\cos^2 x - \frac{1}{4} = 0$

(3)  $\sin x \cos x + \frac{\sqrt{2}}{2} \cos x = 0$

(4)  $\tan(-x) = 3$

(5)  $\cos(2x) = 0$

$$(6) \tan(\pi x) = \sqrt{3}$$

$$(7) \csc(-2x) = 3$$

$$(8) \sin(x + \pi) = \frac{\sqrt{3}}{2}$$

$$(9) \cos(2x + \pi/2) = 1$$

$$(10) \tan(x - \pi/4) = \sqrt{2}$$

$$(11) -2\sin^2(3x) + \sin(3x) + 1 = 0$$