Solve over the reals:

(These problems are important for calculus.)

$$1) \tan^2 x + \tan x = 0$$

2)
$$\cos^2 x - 1 = 0$$

$$3) \quad 2\sin^2 x + \sin x = 1$$

4)
$$\cos^2 x + 1 = 0$$

Let us work some eGrade problems now.