

Dynamics of Trigonometry – Solving Trigonometric Equations by Factoring

Name: _____ Date: _____ Block: _____

Solve the following equations for the variable.

1. $\cos x \tan x = \cos x$

7. $\sin^2 x + 2\sin x + 1 = 0$

2. $\sin^2 x = \sin x$

8. $\cos^2 x - 2\cos x + 1 = 0$

3. $2\cos^2 x = \cos x$

9. $\cot^2 x - \cot^2 x \cos^2 x = 0$

4. $\sec x \sin x = 2\sin x$

10. $\frac{\cos^2 x - 4}{\cos x - 2} = 1$

5. $\tan^2 x = \tan x$

11. $\tan^4 x + 2\tan^2 x - 1 = 0$

6. $\tan^2 x = \sqrt{3}\tan x$

12. $1 - 2\sin^2 x + \sin^4 x = 0$