Решение уравнений методом разложения на множители

$$1. sin^{2}x-sinx=0 $$

$$2. 2 sinx∙cosx=cosx $$

$$3. 9sinx∙cos3x=sinx $$

$$4. 2 cosx∙cos4x+cosx-2cos4x-1=0 $$

$$5. cos^{3}x+cos^{2}x=0 $$

$$6. 2 sinx∙cos6x=sinx $$

$$7. sin^{2}x∙cos^{2}x+sinx∙cosx=0 $$

$$8. tgx+tgx∙cos4x=0 $$

$$9.ctgx-sin2x∙ctgx=0 $$

$$10. \left(sinx+cosx\right)^{2}=sinx+cosx $$

$$11.\left(sinx-1\right)∙tgx-3sinx+3=0 $$

$12. 2cosx∙\left(1+cos2x\right)=cosx$

$13. \left(1-cos6x\right)∙cos20x=sin^{2}3x$

$14. tg\frac{3x}{2}∙cos\left(\frac{π}{6}+x\right)=cos\left(\frac{π}{6}+x\right)$

$$15. ctg^{2}x-4ctgx=0$$

$16. tg^{2}x-2tgx=0$

$17. tg^{3}x=tgx$

$18.\cos(x tgx=0 ) $

$19. \frac{tgx}{sin3x}=0 $

 $ 20.\sin(2x=cos^{4}\frac{x}{2}-sin^{4}\frac{x}{2}) $

$21. \left(1+cos4x\right)\sin(2x=cos^{2}2x) $

$ 22.ctg \left(\frac{3π}{2}+x\right)-tg^{2}x=\left(\cos(2x-1)\right)\frac{1}{cos^{2}x}$

$23. 2ctg^{2}x cos^{2}x+4cos^{2}x-ctg^{2}x-2=0$

$24. \cos(2x=\sqrt{2})\left(\cos(x-\sin(x))\right)$

$25. tg \left(\frac{π}{2}+x\right)-ctg^{2}x+\frac{1}{sin^{2}x}\left(1+\cos(2x)\right)=0 $

$ $