

Срок сдачи: 03.04.2019

10M, 10

$$1. (\cos x - 1) \left(\sin x - \frac{1}{2} \cos 2x - 1 \right) = \sin^2 x.$$

$$2. 2 + \cos x = 2 \operatorname{tg} \frac{x}{2}.$$

$$3. (1 - \operatorname{tg} x)(1 + \sin 2x) = 1 + \operatorname{tg} x.$$

$$4. \sqrt{8 \sin x + \frac{13}{3}} = 2 \cos x + 2 \operatorname{tg} x.$$

$$5. 1 + 2(\cos 2x + \cos 4x + \cos 6x) = 0.$$

$$6. \sin^2 4x + \cos^2 x = 2 \sin 4x \cos^4 x.$$

$$7. \operatorname{tg} x - \operatorname{ctg} 3x + \operatorname{ctg} 4x = 0.$$

$$8. 2 \operatorname{tg} 3x - 3 \operatorname{tg} 2x = \operatorname{tg}^2 2x \operatorname{tg} 3x.$$

$$9. \frac{\cos x}{\cos 3x} - \frac{\cos 5x}{\cos x} = 8 \sin x \sin 3x.$$

$$10. 2 + \sqrt{3} \cos x + |\sin x| = 4 \sin^2 x.$$

$$11. \sin^2 2x + \sin^2 4x = 1 - \frac{\cos 2x}{\cos 3x}.$$