

Universal almashtirishlar

1.135. Tenglamani yeching:

1) $2\sin^2x + \cos^2x - 2 = 0;$

2) $2\sin^2x + \cos x = 0;$

3) $\sin x \cos x = 0;$

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

5) $\sin x \cos x = \frac{\sqrt{3}}{4};$

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

1.136. Bir jinsli va unga keltiriladigan tenglamani yeching:

1) $\sin^2x - 2\sin x \cos x + \cos^2x = 0;$

2) $7\cos^2x - 3\sin^2x = 0;$

3) $\cos^2 2x - 10\sin 2x \cos 2x + 21\sin^2 2x = 0;$

4) $8\sin^2x - \cos^2x = 0;$

5) $\cos^2x - 2\cos 2x - 4\sin^2x = 0;$

$$6) \sin^2 3x + 7\cos^2 3x = 6\sin 3x \cos 3x;$$

$$7) \cos^6 x + \cos^4 x \sin^2 x = \cos^3 x \sin^3 x + \cos^2 x \sin^4 x;$$

$$8) 2\sin^4 x - 6\sin^3 x \cos x - 23\cos^2 x \sin^2 x = 0;$$

$$9) 10\cos^2 \frac{x}{2} - 3\sin x - 5 = 0;$$

$$11) \sin^6 x + \cos^6 x = \frac{1}{4};$$

$$10) \cos^4 x - \sin^4 x = 2\sin^2 x;$$

$$12) \sin^8 x + \cos^8 x = \cos^2 2x.$$

1.137. O‘rniga qo‘yish usulidan foydalanib yeching:

$$1) \cos^2 x + 1 = 2\cos x;$$

$$2) 3\cos^2 x \sin x + 1 = 3\cos^2 x + \sin x;$$

$$3) 6\cos^3 x + 6\sin^2 x - 3\cos x - 3 = 0;$$

$$4) 5\sin^2 x \cos x + 6\cos^2 x - 10\cos x + 6 = 0;$$

$$5) 1 + \sin^2 2x = (1 - \cos^2 x)^2.$$