Résoudre dans \mathbb{R} , puis dans $[0, 2\pi]$ les équations suivantes :

1.
$$\cos(3x-2) = \cos(2x-1)$$

2.
$$\sin(3x - \frac{\pi}{3}) = \sin(2x + \frac{\pi}{6})$$

3.
$$\tan(x+1) + \tan(3x+1) = 0$$

4. $\sin^2 x = \frac{1}{x}$

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5. $\sin(2x) = \cos\left(\frac{x}{2}\right)$

3.
$$\sin\left(2x\right)$$

6.
$$\sin\left(2x - \frac{1}{4}\right) = -\cos\left(x + \frac{1}{6}\right)$$

9. $\sqrt{3}\cos^2 x + 2\cos x \sin x - \sqrt{3}\sin^2 x = \sqrt{2}$

11. $\tan^4(x) + 2\tan^2(x) - 3 = 0$

$$\left(2x - \frac{\pi}{4}\right) = -\cos$$

10. $1 + \cos x + \sin(5x) + \sin(6x) = 0$

6. $2\cos^2(3x) + 3\cos(3x) + 1 = 0$

7.
$$2\sin^2 x = \sqrt{3}\sin(2x)$$

8. $\sin\left(2x - \frac{\pi}{4}\right) = -\cos\left(x + \frac{\pi}{6}\right)$

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$$\sin\left(2x - \frac{\pi}{4}\right) = -\cos\left(x + \frac{\pi}{6}\right)$$

$$+\frac{\pi}{6}$$
)

$$\operatorname{os}\left(x + \frac{\pi}{6}\right)$$

$$\left(x+\frac{\pi}{6}\right)$$