

$$|x^2 - x + 1| = |2x - 3x^2|$$

$$\Leftrightarrow x^2 - x + 1 = 2x - 3x^2 \quad \text{ou} \quad x^2 - x + 1 = -2x + 3x^2$$

$$\Leftrightarrow 4x^2 - 3x + 1 = 0 \quad \text{ou} \quad 2x^2 - x - 1 = 0$$

$$\Leftrightarrow \Delta = 9 - 16 = -7$$

$$\Delta = 1 + 8 = 9$$

Pas de solutions

$$\text{ou } x = \frac{1 + \sqrt{9}}{4} = 1$$

$$\text{ou } x = \frac{1 - \sqrt{9}}{4} = \frac{1 - 3}{4} = -\frac{1}{2}$$

Donc $x = 1$ ou $x = -1/2$