



# 数学I

## 第3章 2次関数

### 2次不等式応用



$$(f(x)) \quad x^2 - 6x + 9 \geq 0$$

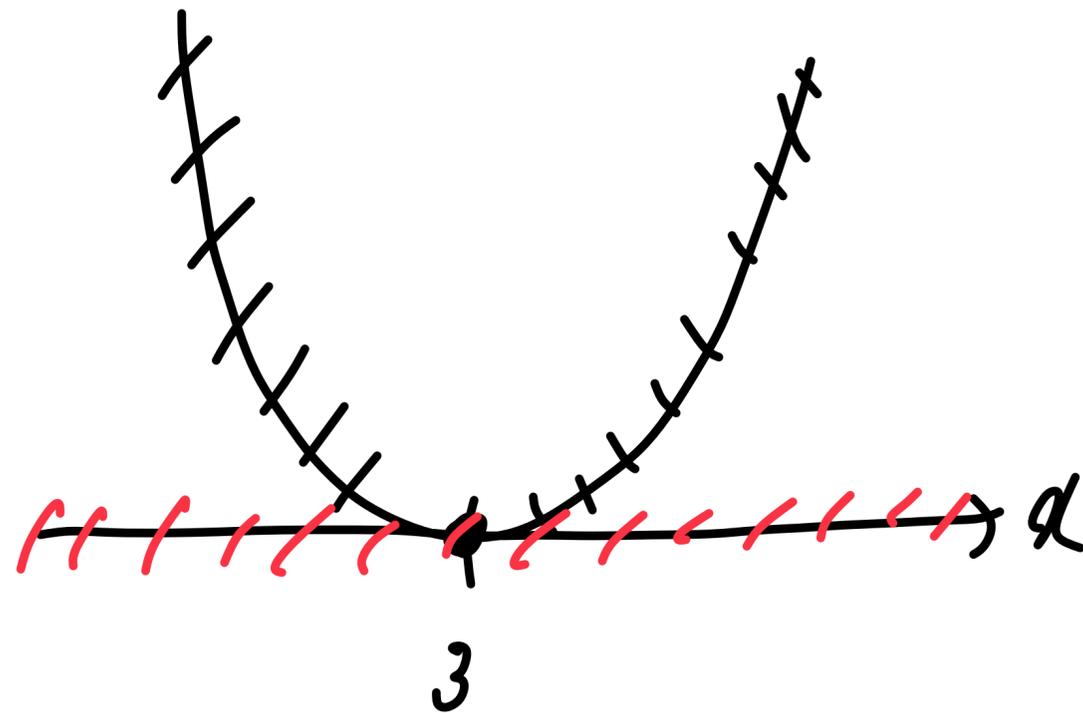
$$y = x^2 - 6x + 9$$

$$y \geq 0 \text{ となる } x \text{ の範囲}$$

$$x^2 - 6x + 9 = 0$$

$$(x - 3)^2 = 0$$

$$x = 3$$



$$x^2 - 6x + 9 \geq 0$$

可なり2の実数

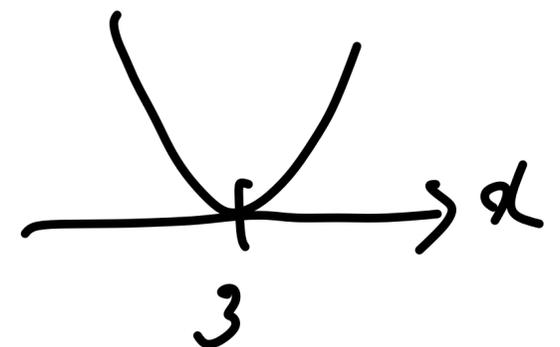
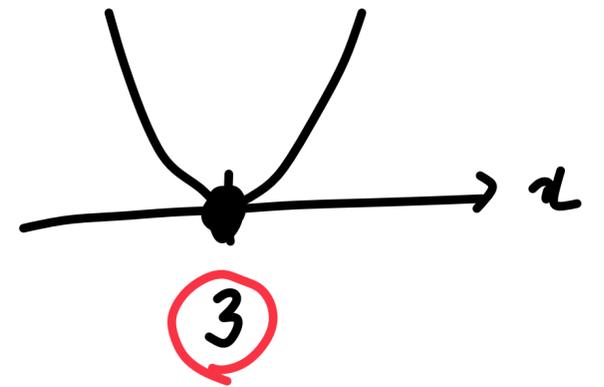
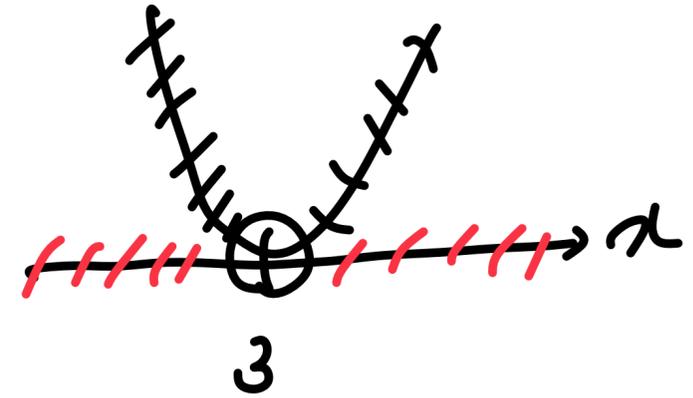


$$x^2 - 6x + 9 \geq 0 \Rightarrow \text{可成2の実数}$$

$$x^2 - 6x + 9 > 0 \Rightarrow \text{3以外、可成2の実数}$$

$$x^2 - 6x + 9 \leq 0 \Rightarrow x = 3$$

$$x^2 - 6x + 9 < 0 \Rightarrow \text{解なし}$$



(2x)

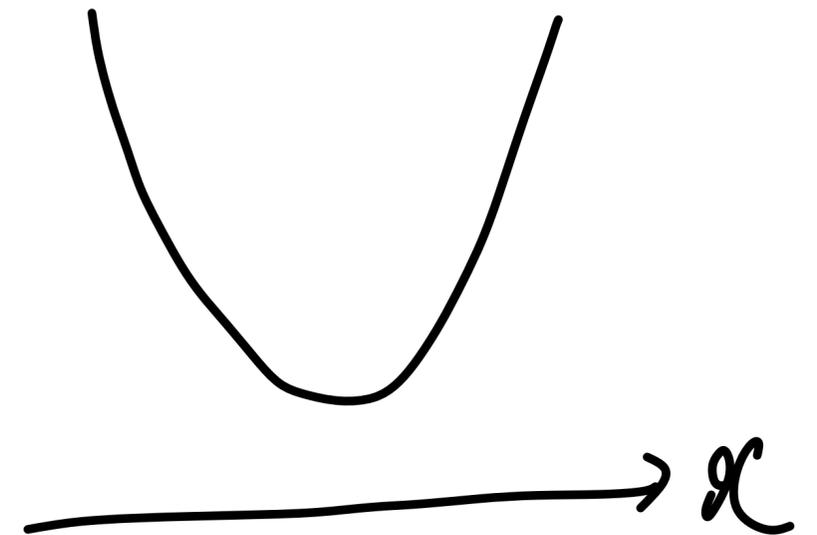
$$\left\{ \begin{array}{l} x^2 - 6x + 10 \geq 0 \\ x^2 - 6x + 10 > 0 \\ x^2 - 6x + 10 \leq 0 \\ x^2 - 6x + 10 < 0 \end{array} \right.$$

$$x^2 - 6x + 10 = 0$$

$$\frac{D}{4} = (-3)^2 - 1 \cdot 10$$

$$= -1$$

$$\frac{D}{4} < 0$$



この問題は、自分で考えよう！！