

$$-5x^2 + 4x + 1$$

$$\begin{aligned}\Delta &= b^2 - 4 \times (-5) \times 1 \\ &= 16 + 20 \\ &= 36\end{aligned}$$

$$\Delta > 0$$

$$\begin{cases} x_1 = \frac{-4 - 6}{-5 \times 2} = \frac{-10}{-10} = 1 \\ x_2 = \frac{-4 + 6}{-5 \times 2} = \frac{2}{-10} = -\frac{1}{5} \end{cases}$$

x	$-\infty$	$-1/5$	1	$+\infty$
$f(x) - g(x)$	$-$	0	0	$-$

also

Pour $\forall x \in \mathbb{R}$:

- Sur $]-\infty; -\frac{1}{5}[$ $f(x) - g(x) < 0$ ainsi $f(x) < g(x)$.
- Sur $]-\frac{1}{5}; 1[$ $f(x) - g(x) > 0$ ainsi $f(x) > g(x)$.
- Sur $]1; +\infty[$ $f(x) - g(x) < 0$ ainsi $f(x) < g(x)$.