

$$\begin{array}{r} 2140 \\ 133 \end{array}$$

$$P(x) = 2x^4 - 6x^3 + 5x^2 - 3x + 2 \quad | \quad \begin{array}{l} (x-1) \cdot (x-2) \\ 2x^2+1 \end{array}$$

$$P(x) \mid \frac{x-1}{n(x)}$$

$\Rightarrow$

$$n(x) \mid \frac{x-2}{n'(x)}$$

$$\Rightarrow P(x) = (x-1) \cdot n(x) \\ P(x) = (x-1) \cdot (x-2) \cdot n'(x)$$

Horner

	2	-6	5	-3	2	1
+	//	2	-4	1	-2	
+	2	-4	1	-2	0	

$v=0 \Rightarrow$

$$n(x) = 2x^3 - 4x^2 + x - 2 \quad | \quad \begin{array}{l} x-2 \\ 2x^2+1 \end{array}$$

Horner

	2	-4	1	-2	2
+	///	4	0	2	
+	2	0	1	0	

$$v'=0 \Rightarrow n'(x) = 2x^2 + 1$$

$$2x^4 - 6x^3 + 5x^2 - 3x + 2 = (x-1) \cdot (2x^3 - 4x^2 + x - 2) \\ = (x-1) \cdot (x-2) \cdot (2x^2+1)$$