Consideremos:
$$f(x) = (1+x)^{-1/2} \implies f(0) = 1$$

 $f'(x) = -\frac{1}{2}(1+x)^{-3/2} \implies f'(0) = -1/2$
 $f''(x) = \frac{3}{2^2}(1+x)^{-5/2} \implies f''(0) = \frac{3}{2^2}$
 $f'''(x) = -\frac{3 \cdot 5}{2^3}(1+x)^{-7/2} \implies f'''(0) = -\frac{3 \cdot 5}{2^3}$
 $f'''(x) = \frac{3 \cdot 5 \cdot 7}{2^4}(1+x)^{-9/2}$

$$\Rightarrow \begin{cases} P_3(x)f_{10}) = 1 - \frac{x}{2} + \frac{3}{2^3}x^2 - \frac{5}{2^4}x^3 \\ R_3(x)f_{10}) = \frac{5 \cdot 7 \cdot x^4}{2^7 (1+c)^{9/2}} \approx n \quad c \in (0, 2) \end{cases}$$

$$\Rightarrow \left(1+x\right)^{-1/2} = 1 - \frac{x}{2} + \frac{3x^2}{2^3} - \frac{5x^3}{2^4} + \frac{5 \cdot 7 \cdot x^4}{2^7 (1+c)^{9/2}}$$

$$= 1 - \frac{x}{2} + \frac{3x^2}{2^3} - \frac{5x^3}{2^4} + \frac{5 \cdot 7 \cdot x^4}{2^7 (1+c)^{9/2}}$$

$$= \frac{1}{2^7} + \frac{1}{$$

En particular:

$$(1-1)^{-1/2} = 1 - \frac{(0.1)}{2} + \frac{3(0.1)^2}{2^3} - \frac{5 \cdot (0.1)^3}{2^4} + \frac{5 \cdot 7 \cdot (0.1)^4}{2^7 \cdot (1+c)^{9/2}}$$

donde CE (0,0.1) Error = $\left| \frac{5 \cdot 7 \cdot (0.1)^4}{2^7 \cdot (1+c)^{9/2}} \right| \leq \frac{5 \cdot 7 \cdot (0.1)^4}{2^7} = 0.000027...$

CE(OIL)