

10. Find the remainder when  $4x^4 - 5x^3 + 2x^2 + 7x - 2$  is divided by  $2x^2 + 3x - 1$ .

$$\begin{array}{r} 4x^4 - 5x^3 + 2x^2 + 7x - 2 \mid 2x^2 + 3x - 1 \\ 4x^4 + 6x^3 - 2x^2 \quad \mid 2x^2 - 11/2x + 41/4 \\ \hline -11x^3 + 4x^2 + 7x \\ -11x^3 - 33/2x^2 + 11/2x \\ \hline 41/2x^2 + 3/2x - 2 \\ 41/2x^2 + 123/4x - 41/4 \\ \hline -117/4x + 33/4 \\ (33 - 117x)/4 \end{array}$$