③ let $p(x) = 3x^4 + 6x^3 - 2x^2 - 10x - 5$

given zeros $\sqrt{\frac{5}{3}}, -\sqrt{\frac{5}{3}}$

polynomial with given zeros $[g(x)]$

$= (x-\alpha)(x-\beta)k$

$= (x-\sqrt{\frac{5}{3}})(x+\sqrt{\frac{5}{3}})k$

$= (x^2 - \frac{5}{3})3 \quad (k=3)$

$= \frac{3x^2-5}{3} \times 3$

$$
\begin{array}{r|l}
 & x^2+2x+1 \\
\hline
3x^2-5 & 3x^4+6x^3-2x^2-10x-5 \\
 & 3x^4 \quad -5x^2 \\
 & - \quad + \\
\hline
 & 6x^3+3x^2-10x-5 \\
 & 6x^3 \quad -10x \\
 & - \quad + \\
\hline
 & 3x^2-5 \\
 & 3x^2-5 \\
 & - \quad + \\
\hline
 & 0
\end{array}
$$

$\therefore p(x) = g(x)[x^2+2x+1]$

$= (x^2+x+x+1)[g(x)]$

$= x(x+1)+1(x+1)[g(x)]$

$= (x+1)(x+1)[g(x)]$

remain. two zeros are $-1, -1$ $[\because x+1=0 \Rightarrow x=-1]$