

**Divide: SHOW ALL WORK ON A SEPARATE SHEET!!!**

- 1) Divide using Synthetic Division:  

$$\begin{array}{r} -2x^5 + 2x^4 + 2x^3 - 3x^2 - 4x - 1 \\ \hline x - 3 \end{array}$$
- 2) Divide using Synthetic Division:  

$$\begin{array}{r} 2x^6 - x^5 - 3x^4 - 2x^3 - 5x^2 + 2x + 4 \\ \hline x + 2 \end{array}$$
- 3) Divide using Synthetic Division:  

$$\begin{array}{r} -3x^2 - 3x + 2 \\ \hline x + 1 \end{array}$$
- 4) Divide using Synthetic Division:  

$$\begin{array}{r} x^4 + 2x^2 + 3x - 2 \\ \hline x - 3 \end{array}$$
- 5) Divide using Synthetic Division:  

$$\begin{array}{r} -5x^4 + 5x^3 + 3x - 1 \\ \hline x - 1 \end{array}$$
- 6) Divide using Synthetic Division:  

$$\begin{array}{r} 2x^6 + 5x^5 - x^4 - x^3 - 5x^2 - 2 \\ \hline x + 4 \end{array}$$
- 7) Divide using Synthetic Division:  

$$\begin{array}{r} -5x^5 - 2x^4 - 3x^3 + x^2 - 2x - 1 \\ \hline x + 2 \end{array}$$
- 8) Divide using Synthetic Division:  

$$\begin{array}{r} -4x^4 + x^3 - x^2 - 4x + 3 \\ \hline x - 3 \end{array}$$
- 9) Divide using Synthetic Division:  

$$\begin{array}{r} -x^4 - 3x^3 + 3x^2 - 4x - 5 \\ \hline x + 3 \end{array}$$
- 10) Divide using Synthetic Division:  

$$\begin{array}{r} 3x^6 - x^5 + 2x^4 + 3x^3 + x^2 - 2x - 1 \\ \hline x + 1 \end{array}$$