

Pencils and Erasers Only – No Calculators Needed.

- 1 Use polynomial long division to find the quotient and remainder on division of $P(x) = 9x^4 + 3x^3 + 7x^2 + 14x - 17$ by $D(x) = 3x^2 - x + 5$.

2 Let $f(x) = \frac{4x + 25}{2x - 5}$. Write the alternative formula for $f(x)$ furnished by polynomial long division.

3 Use **synthetic division** to find the quotient and remainder on division of $P(x) = 9x^4 + 3x^3 + 7x^2 + 14x - 17$ by $(x + 2)$.