

2. Use synthetic division to simplify $\frac{x^3 - 4x^2 + 6x - 4}{x - 2}$.

3. Use synthetic division to divide $x^2 + 3x + 5$ by $x + 1$.

4. Complete using synthetic division. $x - 5 \overline{) 3x^3 - 17x^2 + 15x - 25}$

5. Prove using synthetic division whether -4 is a zero of $x^3 - 13x + 12$.

6. Use synthetic and/or long division to find all the zeros of $x^3 - 5x^2 + 8x - 4$ if $f(1) = 0$ then graph the polynomial.