40 Problems in Dividing a Polynomial by a Polynomial
Using Synthetic Division
(Part 1)

PROBLEMS

Use synthetic division to determine the quotient and remainder. (Include the quotient written out as a polynomial.)

1. $\dfrac{x^2+x-6}{x-2}$.

2. $\dfrac{3x^2-2x-8}{x-2}$.

3. $\dfrac{3x^2-10x+8}{x-2}$.

4. $\dfrac{3x^2+2x-8}{x+2}$.

5. $\dfrac{3x^2-2x-7}{x-2}$.

6. $\dfrac{3x^2-12}{x-2}$.

7. $\dfrac{3x^2-10}{x-2}$.

8. $\dfrac{x^2+9x+18}{x+3}$.