

Polynomials, Division by binomial

Procedure

Use the long division algorithm

Find the following quotients

$$1. \quad x+3 \overline{)x^2 + 7x + 12}$$

$$2. \quad x+5 \overline{)x^2 + 9x + 30}$$

$$3. \quad x+2 \overline{)x^2 + 9x + 14}$$

$$4. \quad x-2 \overline{)x^2 + x - 6}$$

$$5. \quad x+2 \overline{)x^2 - 4x - 12}$$

$$6. \quad x-6 \overline{)x^2 - 10x + 24}$$

$$7. \quad x-5 \overline{)x^2 - 8x + 15}$$

$$8. \quad \frac{x^2 - x - 6}{x + 2}$$

$$9. \quad 2x+3 \overline{)6x^2 + 11x + 3}$$

$$10. \quad 3x-1 \overline{)15x^2 + 7x - 4}$$