

# Homework

p. 366: 11, 13, 21, 23, 29, 31

**USING SYNTHETIC DIVISION** Divide using synthetic division.

11.  $(2x^2 - 7x + 10) \div (x - 5)$

13.  $(x^2 + 8x + 1) \div (x + 4)$

**FACTOR** Given polynomial  $f(x)$  and a factor of  $f(x)$ , factor  $f(x)$  completely.

21.  $f(x) = x^3 - 10x^2 + 19x + 30; x - 6$

23.  $f(x) = x^3 - 2x^2 - 40x - 64; x - 8$

**FIND ZEROS** Given polynomial function  $f$  and a zero of  $f$ , find the other zeros.

29.  $f(x) = x^3 - 2x^2 - 21x - 18; -3$

31.  $f(x) = 10x^3 - 81x^2 + 71x + 42; 7$