

**2.5 PreQuiz: Operations on polynomials**

1. With or without a calculator, evaluate each polynomial for the given value of  $x$ .

(a)  $f(x) = 2x^3 + 7x^2 - 3x + 5$ ,  $x = 0$

$$f(0) =$$

(b)  $g(x) = x^4 + 7x^3 - 2$ ,  $x = 1$

$$g(1) =$$

2. Use a calculator to find the value of  $h(x) = x^3 + 5x^2 - 4x + 12$  for  $x = -7$ .

$$h(-7) =$$

3. A polynomial  $A$  is used to model the value of an investment account. Two deposits were made which earned interest annually.

$$A(x) = 650x^6 + 400x^3$$

- (a) The first deposit of \$650 was made six years ago. How much was the second deposit, and how long ago was it made?

- (b) Find the value of  $A(x)$  for  $x = 1.06$  to the *nearest cent*.

- (c) If the interest rate earned on the account is  $r = 4\frac{1}{2}\%$  what value of  $x$  would be used in the formula?

4. adding polynomials, subtracting
5. multiplying with a box, multiplying without a box
6. features of a graph, terminology