Don't you feed that parrot! What your peeps call you:_____

Corrective Assingment 7.2: Polynomials

Write each polynomial in standard form, if not already. Then tell the degree, leading coefficient and name the type of polynomial.
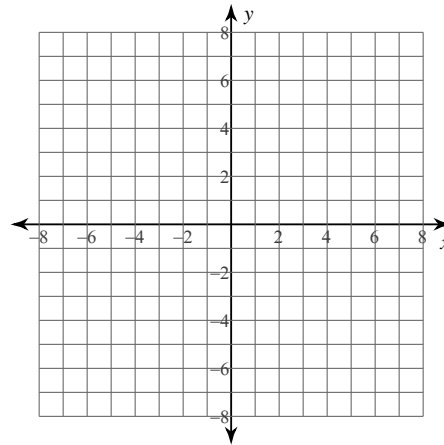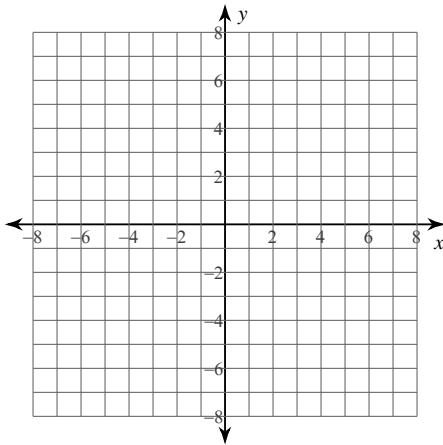
1) $1 - 6x$

2) $9x^4 + 10x$

3) -6

4) $2 + 9x + x^2 - 9x^3$

Sketch the graph of each function by making a table of values. Although it is not necessary, you may use your calculator to help giude you.
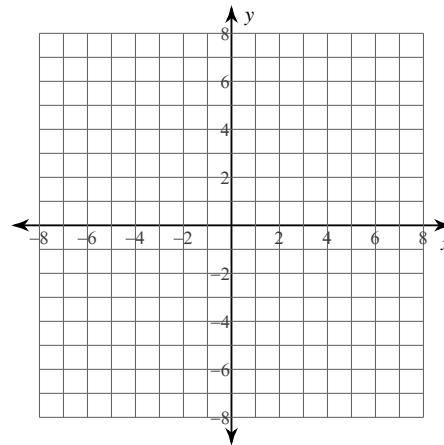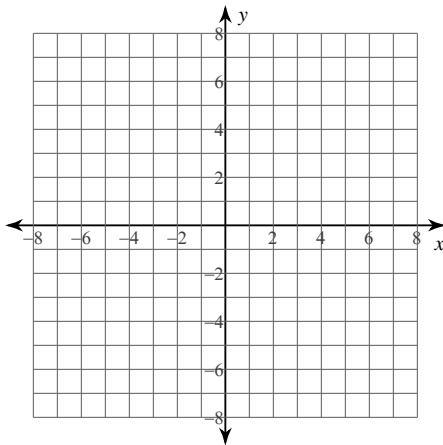
5) $f(x) = -x^3 + x^2 - 4$

6) $f(x) = -x^4 + 2x^2 - x + 2$

7) $f(x) = x^3 - 4x^2 + 6$

8) $f(x) = x^4 - x^2 - x - 1$

Evaluate each function at the given value using direct substitution.

9) $f(x) = x^5 - 5x^4 + 4x^3 - 5x + 20$ at $x = 4$

10) $f(n) = 2n^3 - 9n + 7$ at $n = -2$

11) $f(a) = a^4 + 10a^3 + 28a^2 + 17a - 3$ at $a = -4$

12) $f(x) = x^3 - x^2 - 14x - 8$ at $x = -3$

Evaluate each function at the given value using synthetic substitution.

13) $f(m) = 6m^3 - 23m^2 + 9m + 23$ at $m = 3$

14) $f(a) = a^4 + a^3 + 6a^2 - 17$ at $a = -1$

15) $f(n) = n^3 + 2n^2 - n - 3$ at $n = -2$

16) $f(x) = -6x^3 - 20x^2 + 14x - 5$ at $x = -4$

17) $f(x) = x^3 - 32x + 19$ at $x = -6$

18) $f(x) = x^3 - 11x + 30$ at $x = -4$

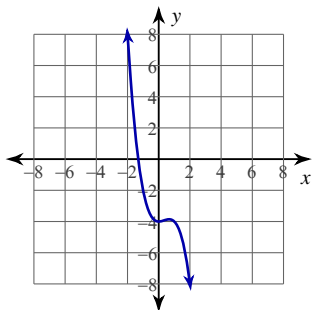# Answers to Corrective Assingment 7.2: Polynomials

1) SF:$-6x + 1$; Degree: 1; LC: -6; Type: Linear
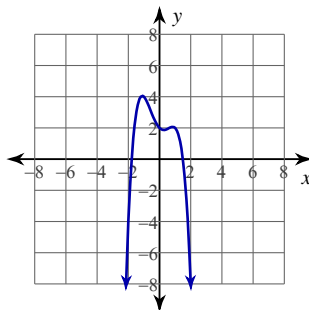2) SF:$9x^4 + 10x$; Degree: 4; LC: 9; Type: Quartic
3) SF:-6; Degree: 0; LC: -6; Type: Constant
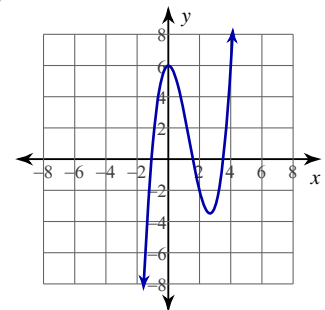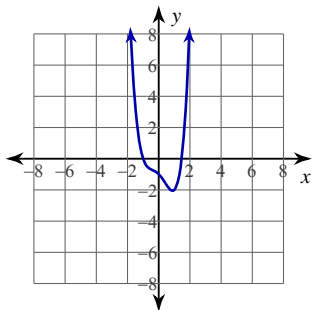4) SF: $-9x^3 + x^2 + 9x + 2$; Degree: 3; LC: -9; Type: Cubic

5)

6)

7)

8)

9) 0

10) 9

11) −7   12) −2   13) 5   14) −11
15) −1   16) 3   17) −5   18) 10