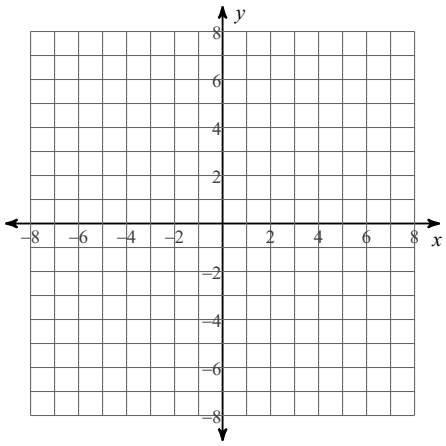
Practice - find x-int, min, max, eval, lc, deg, const, sf, multi, write given zeros

After sketching the graph, determine the zero (x-intercept), the minimum and the maximum for the function. Use technology.

1) $f(x) = -x^3 + 2x^2 + 3$



Evaluate each function at the given value.

2) $f(x) = 3x^3 + 11x^2 + 7x$ at $x = -3$

3) $f(x) = 2x^3 - 4x^2 - x - 2$ at $x = 2$

Identify the degree, leading coefficient, and constant value of each of the following polynomials

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

5) $f(x) = 3x^4 - x^2 - 42$

Find all values of that make the equation true.

6) $(x-4)(x+3)=0$

7) $(x+5)(x-5)=0$

Rewrite the following in standard form.

8) n^2-8n^3+4n

9) $3+v^4+9v^2+6v+10v^3$

Multiply and write your final answer in standard form.

10) $(5n-5)(2n-3)$

11) $5r(5r^2+4r+4)$

Find the x-intercepts of the following polynomials.

12) $(x-2)(x+2)=0$

13) $(x+4)(x-5)=0$

Write a polynomial function that has the given zeros.

14) $3,\ \frac{2}{3},\ -4$

15) $5,\ 0,\ -5$