

Pre-Calculus 30
Characteristics of Polynomial Functions

Degree 0: Constant Function

$$f(x) = 3$$

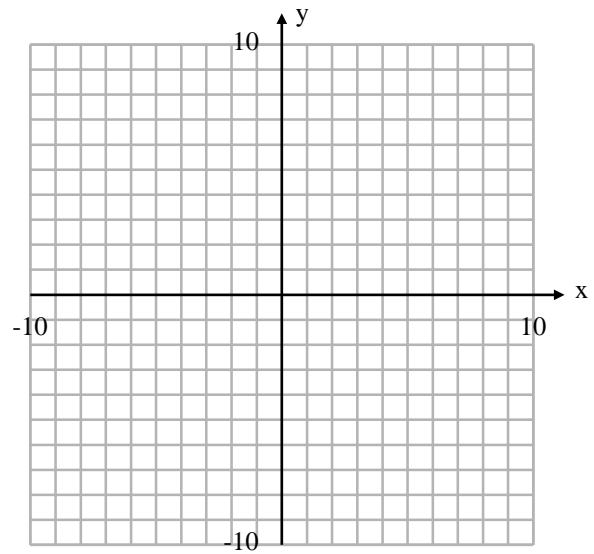
End Behavior:

Domain:

Range:

Number of x-intercepts:

Constant:



Degree 1: Linear Function

$$f(x) = 2x + 1$$

End Behavior:

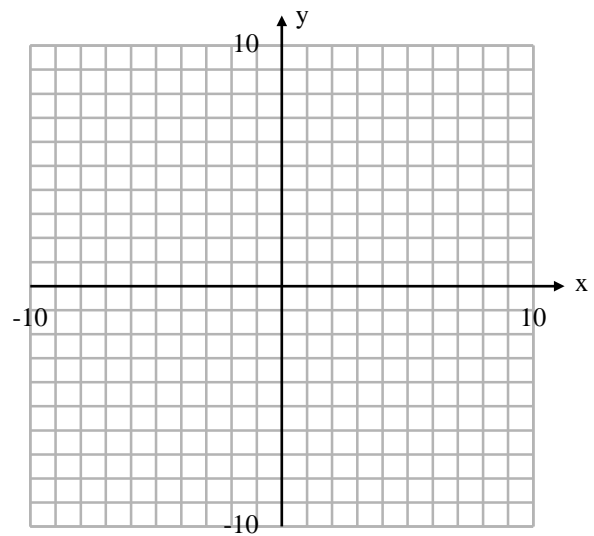
Domain:

Range:

Number of x-intercepts:

Intercepts:

Constant:



Degree 2: Quadratic Function

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

End Behavior:

Domain:

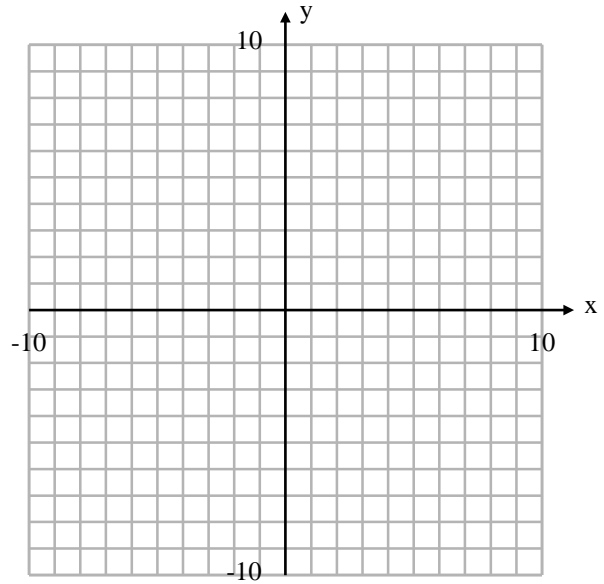
Range:

Number of x-intercepts:

Intercepts:

Vertex/Max or Min:

Constant:



Degree 3: Cubic Function

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

End Behavior:

Domain:

Range:

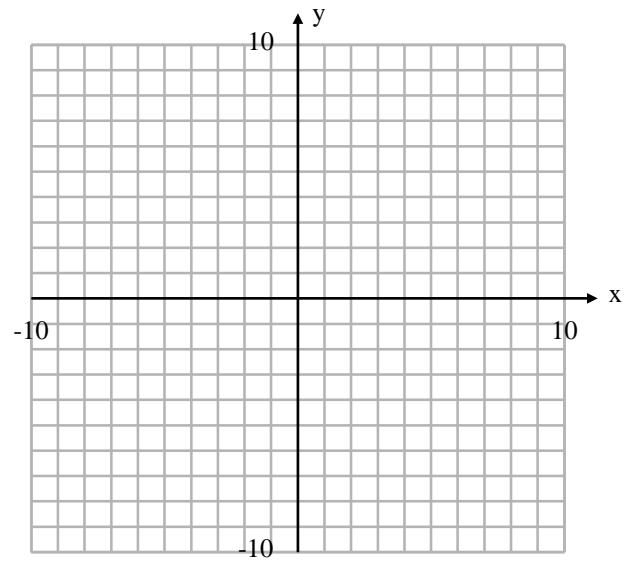
Number of x-intercepts:

Intercepts:

Relative Max:

Relative Min:

Constant:



Degree 4: Quartic Function

$$f(x) = x^4 + 5x^3 + 5x^2 - 5x - 6$$

End Behavior:

Domain:

Range:

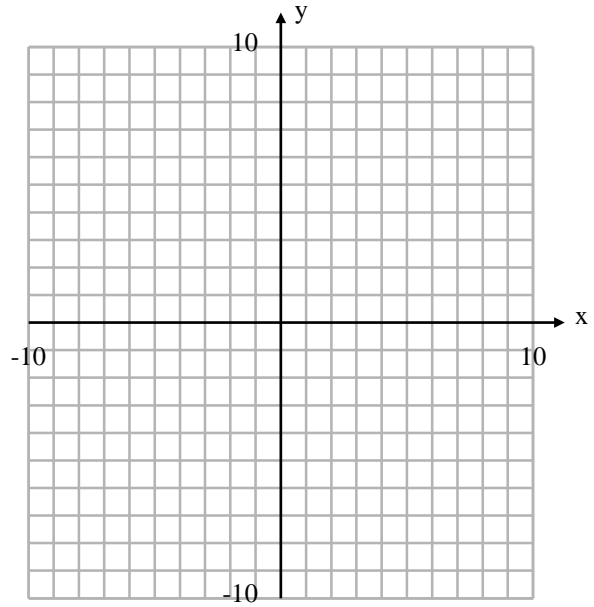
Number of x-intercepts:

Intercepts:

Relative Max:

Relative Minimums:

Constant:



Degree 5: Quintic Function

$$f(x) = x^5 + 3x^4 - 5x^3 - 15x^2 + 4x + 12$$

End Behavior:

Domain:

Range:

Number of x-intercepts:

Intercepts:

Relative Maximums:

Relative Minimums:

Constant:

