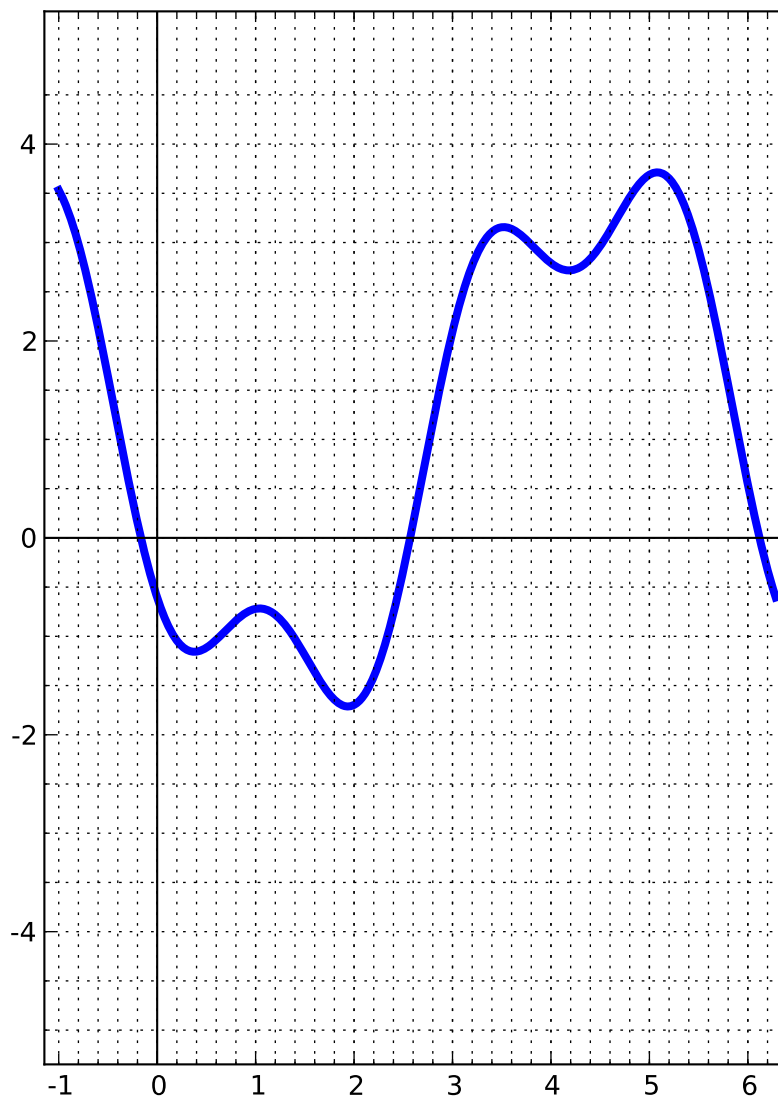


Below is a plot of

$$f(x) = -2 \sin(x + 1) + \sin(x + 2) + 2 \sin(-3x) + \sin(-x) + 2 \cos(-3x + 2) + 1.$$

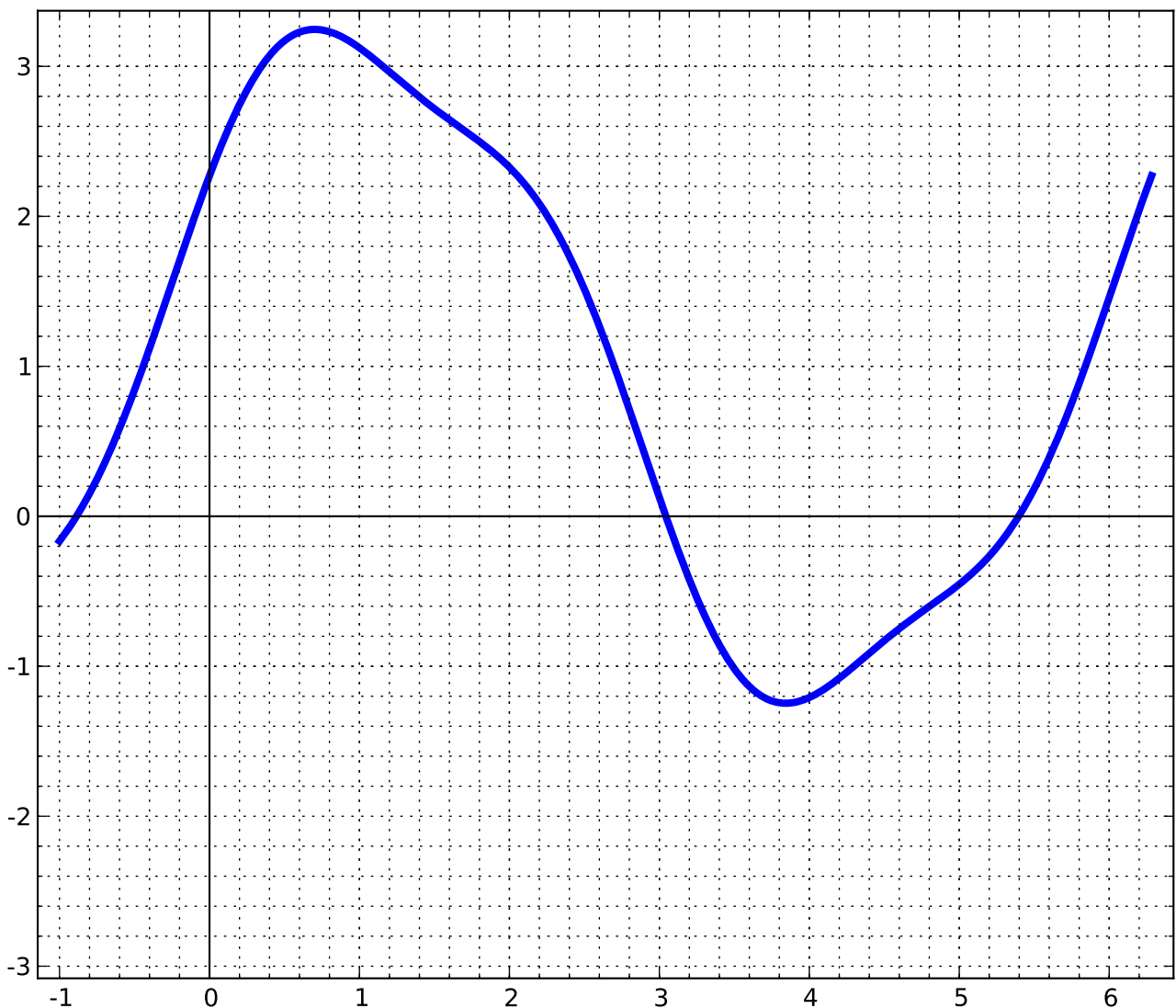
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Below is a plot of

$$f(x) = -2 \sin(-3x + 1) - 2 \sin(-x + 1) + 2 \sin(-x + 2) + 2 \sin(3x + 2) + \cos(x) + 1.$$

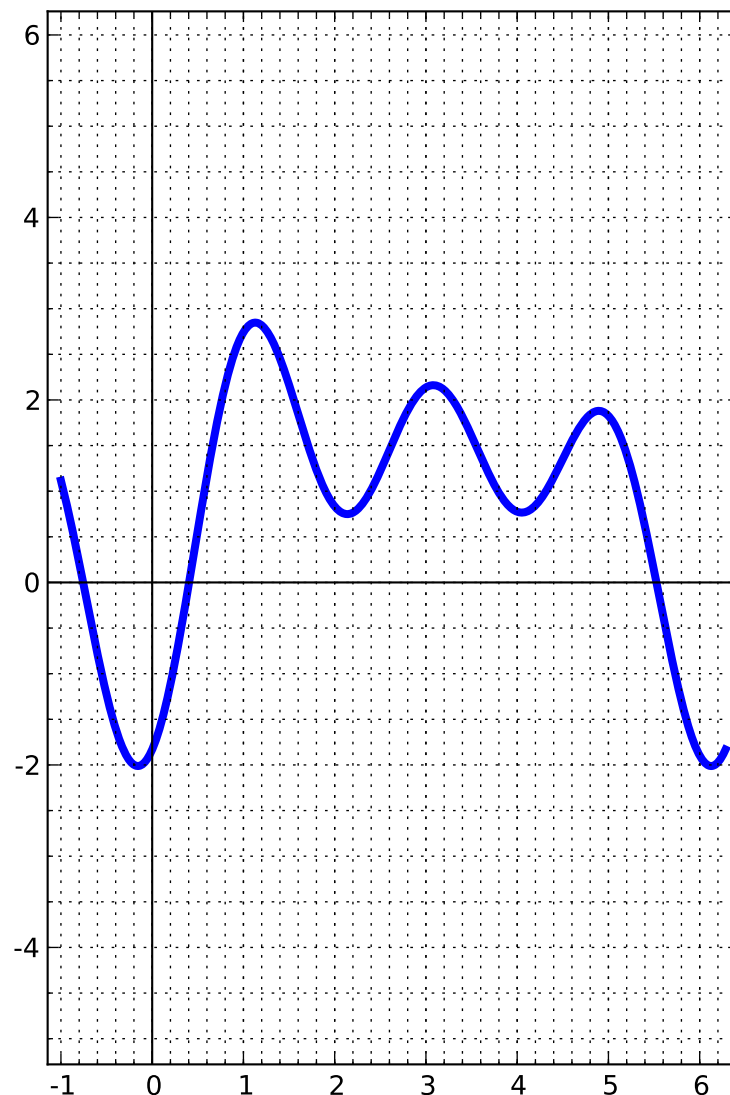
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Below is a plot of

$$f(x) = -\sin(x+2) - \sin(2x+1) - \sin(-2x) + 2\sin(3x) - 2\cos(-3x+1) + 1.$$

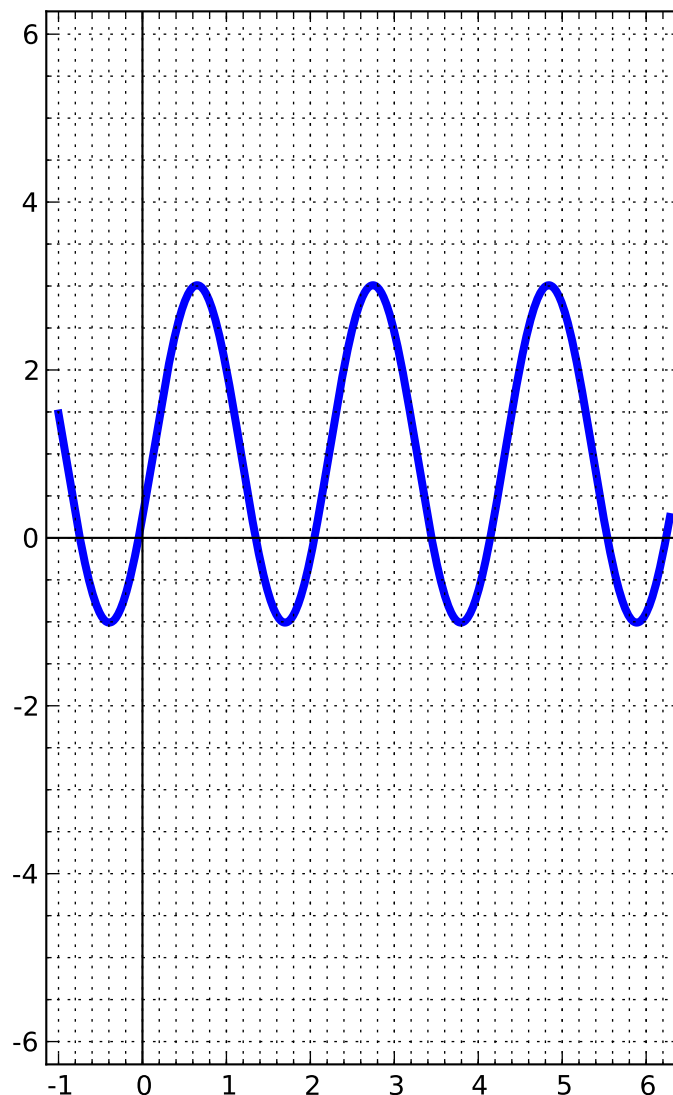
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Below is a plot of

$$f(x) = -\sin(-3x) + \sin(3x) + 2\cos(-3x + 1) + 2\cos(3x + 2) - \cos(3x) + 1.$$

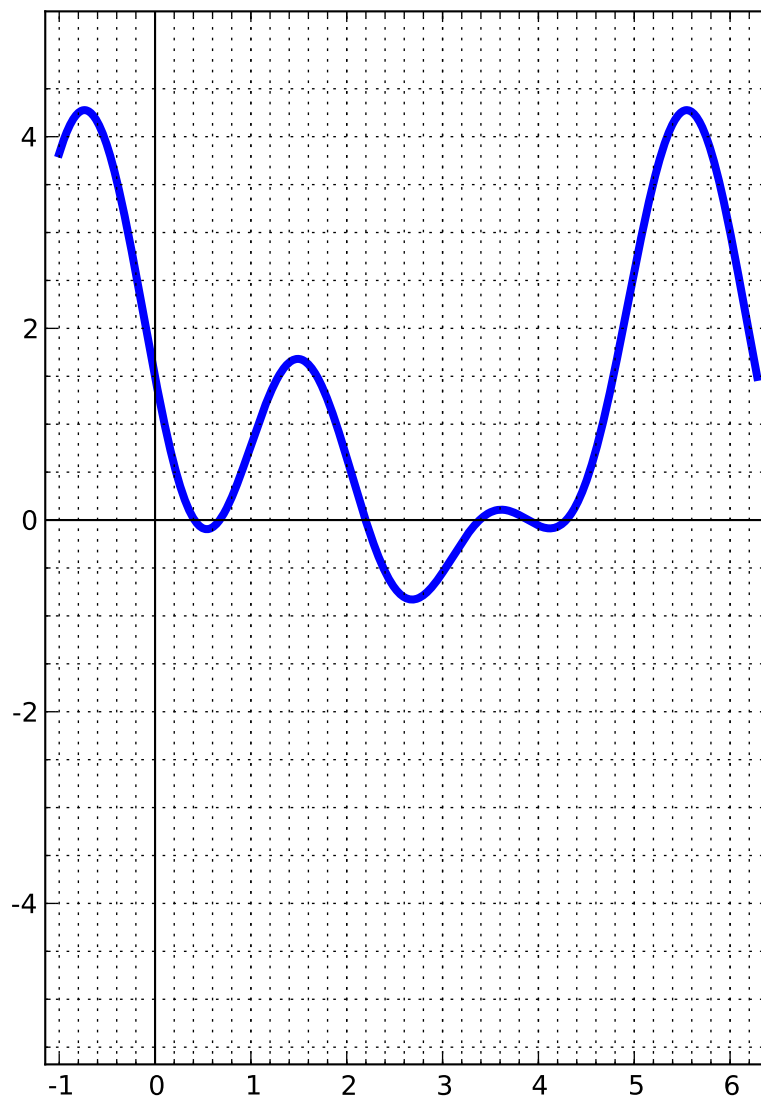
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Below is a plot of

$$f(x) = \sin(-x + 2) - 2 \sin(x) - \cos(x + 2) + \cos(2x + 2) + \cos(3x + 2) + 1.$$

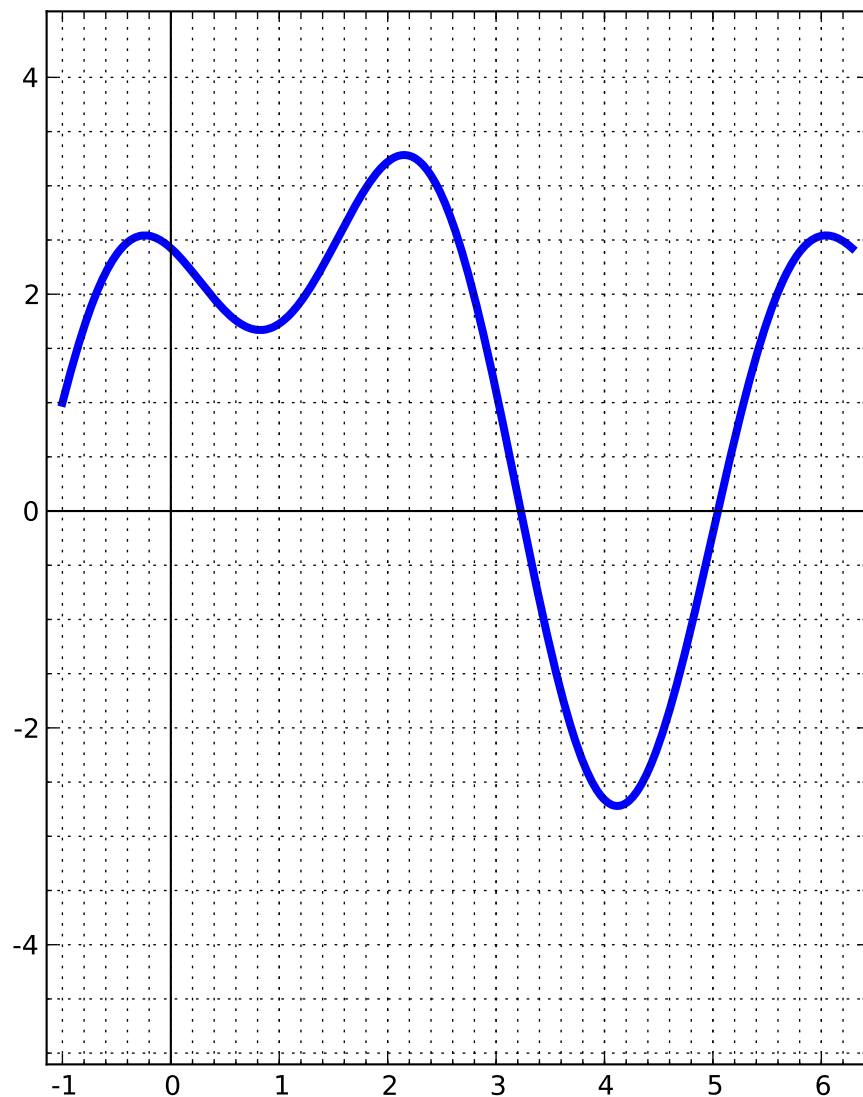
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Below is a plot of

$$f(x) = \sin(-2x + 1) - 2\sin(-x) + \cos(2x + 2) - \cos(-x) + 2\cos(x) + 1.$$

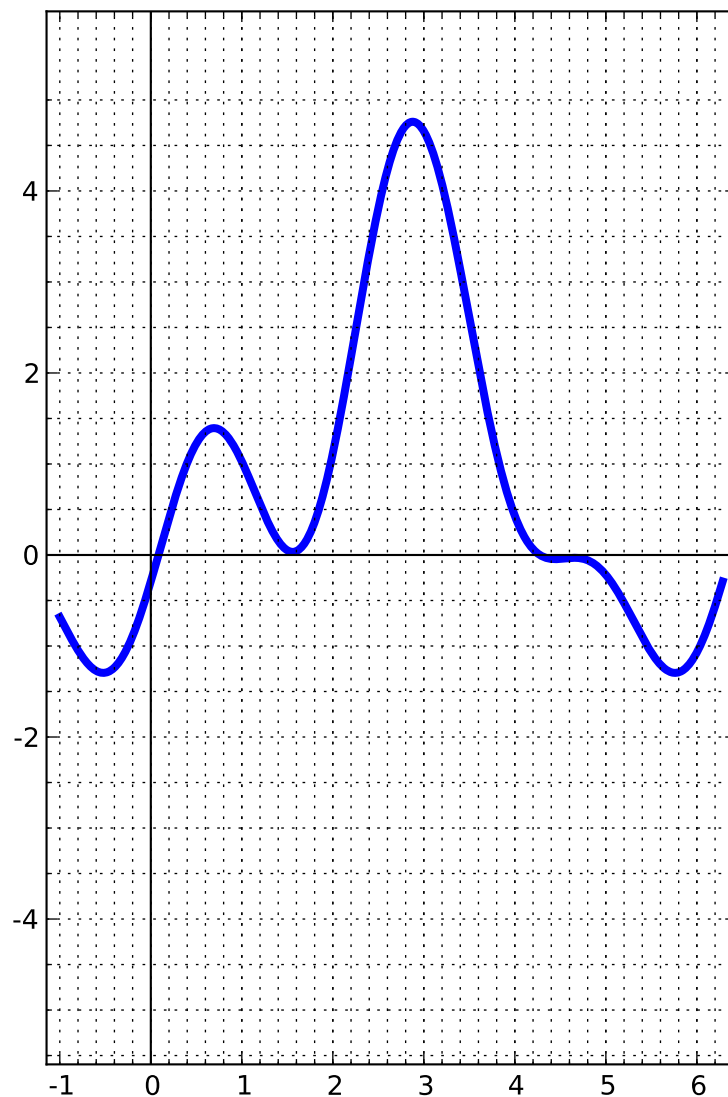
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$$f(x) = -\sin(x+1) - \sin(x+2) + \sin(x) - \cos(3x+1) + \cos(2x) + 1.$$

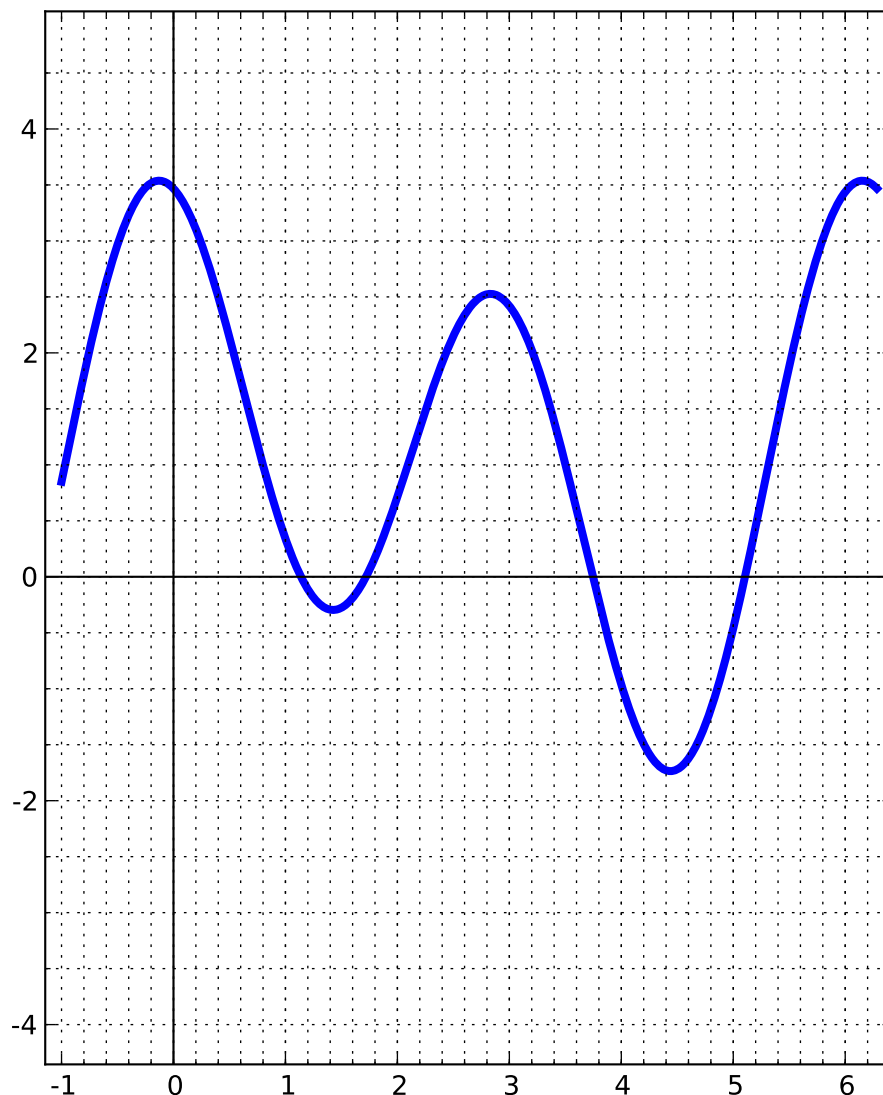
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Below is a plot of

$$f(x) = -\sin(-x+2) + 2\sin(x+1) + 2\sin(2x+2) - \cos(-x+2) - \cos(x+1) + 1.$$

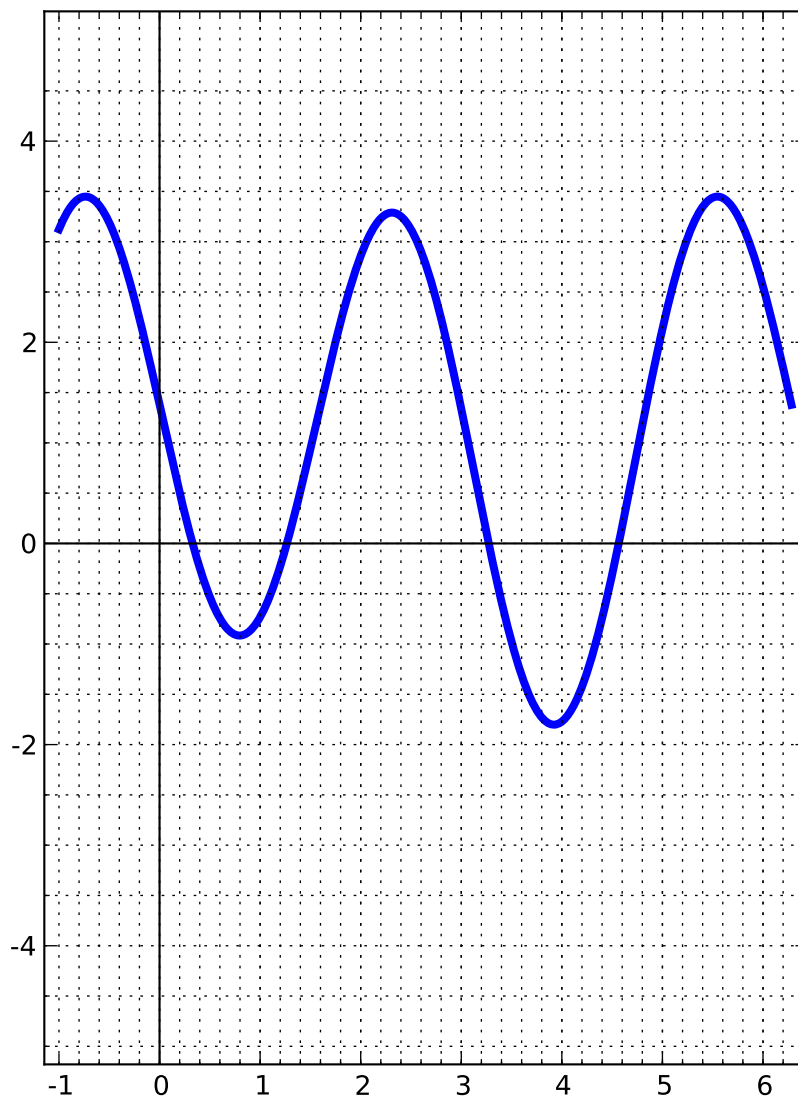
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$$f(x) = \sin(-2x + 1) + \sin(-x + 2) + \sin(-x) - \cos(x + 1) + 2 \cos(2x + 2) + 1.$$

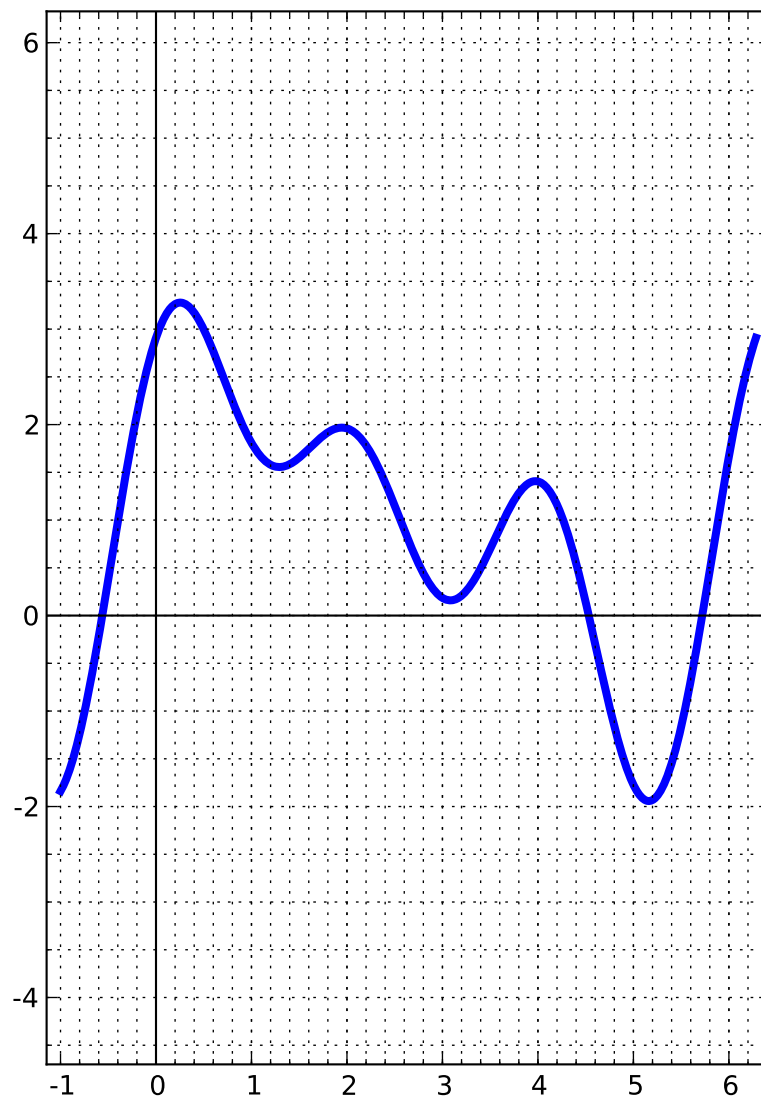
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$$f(x) = \sin(-x + 2) + \cos(-2x + 1) - \cos(x + 1) + \cos(3x) + 1.$$

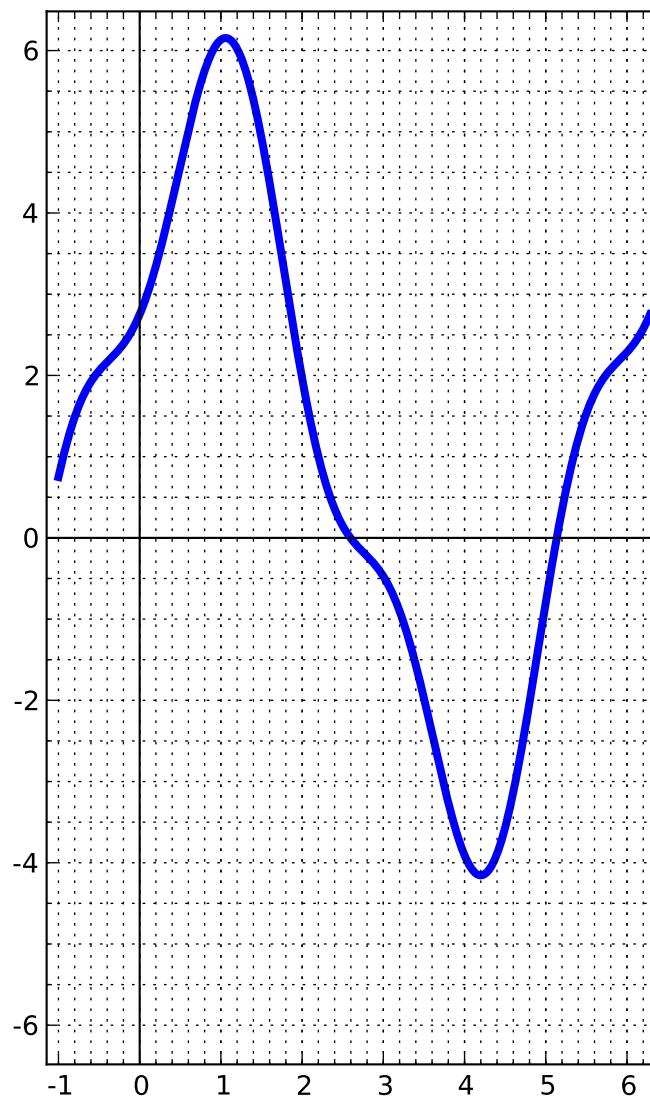
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Below is a plot of

$$f(x) = -2 \sin(-3x + 2) + 3 \sin(-x + 2) + \sin(3x + 1) - 2 \sin(-x) + 1.$$

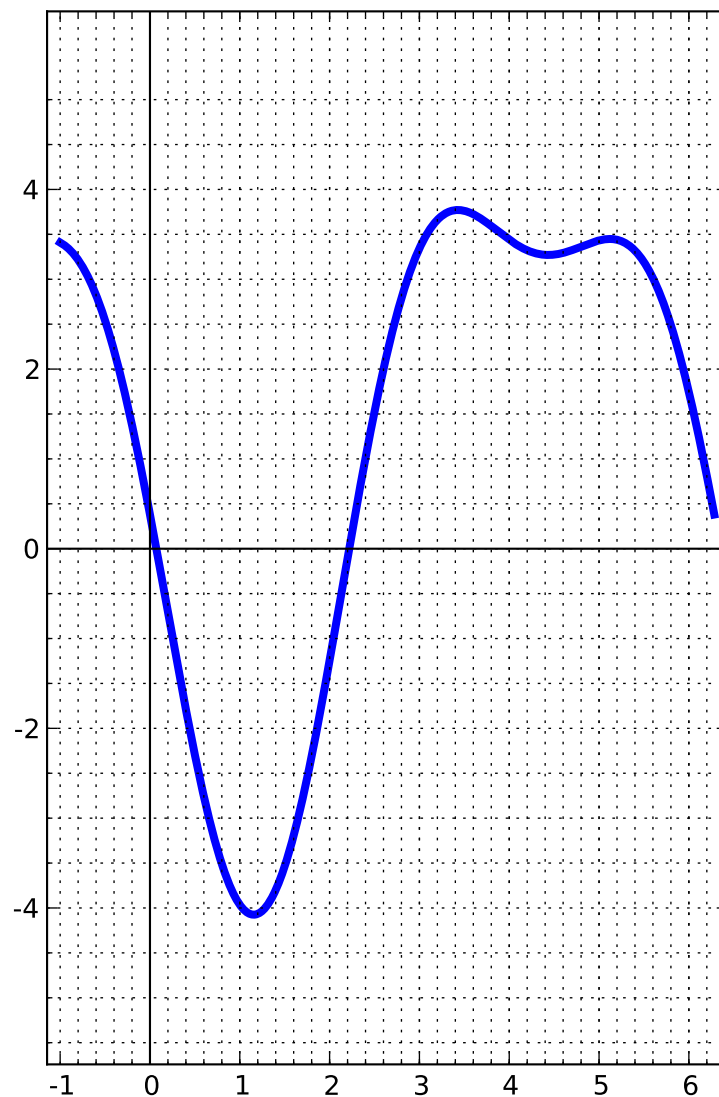
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Below is a plot of

$$f(x) = 2 \sin(-2x + 2) - 2 \sin(x + 1) + \sin(x + 2) + 2 \cos(x + 2) + 2 \cos(2x + 2) + 1.$$

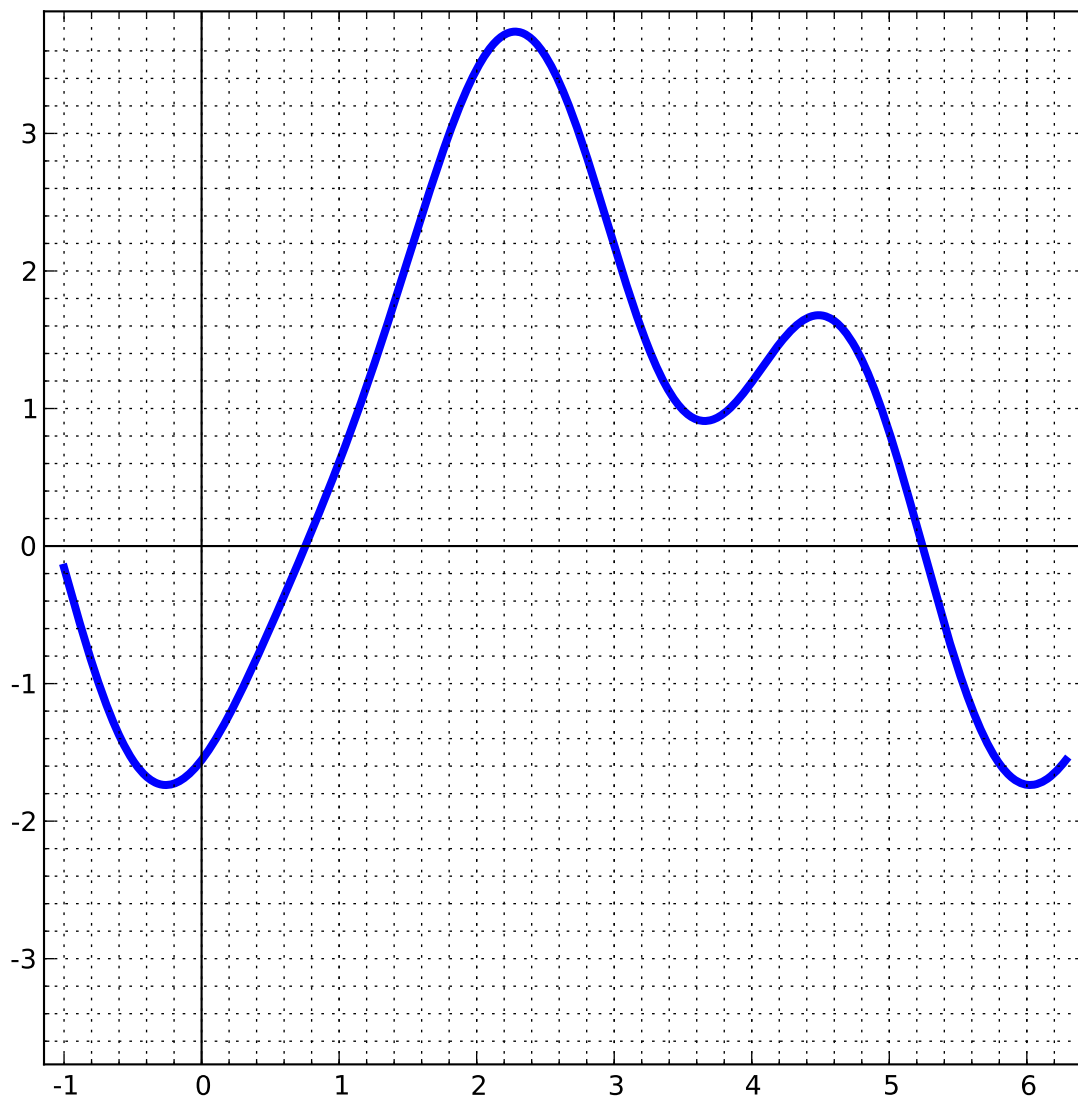
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Below is a plot of

$$f(x) = -2 \sin(-3x + 2) - \sin(-2x + 2) - 2 \sin(x + 2) + \sin(3x + 2) + 2 \cos(-3x + 1) + 1.$$

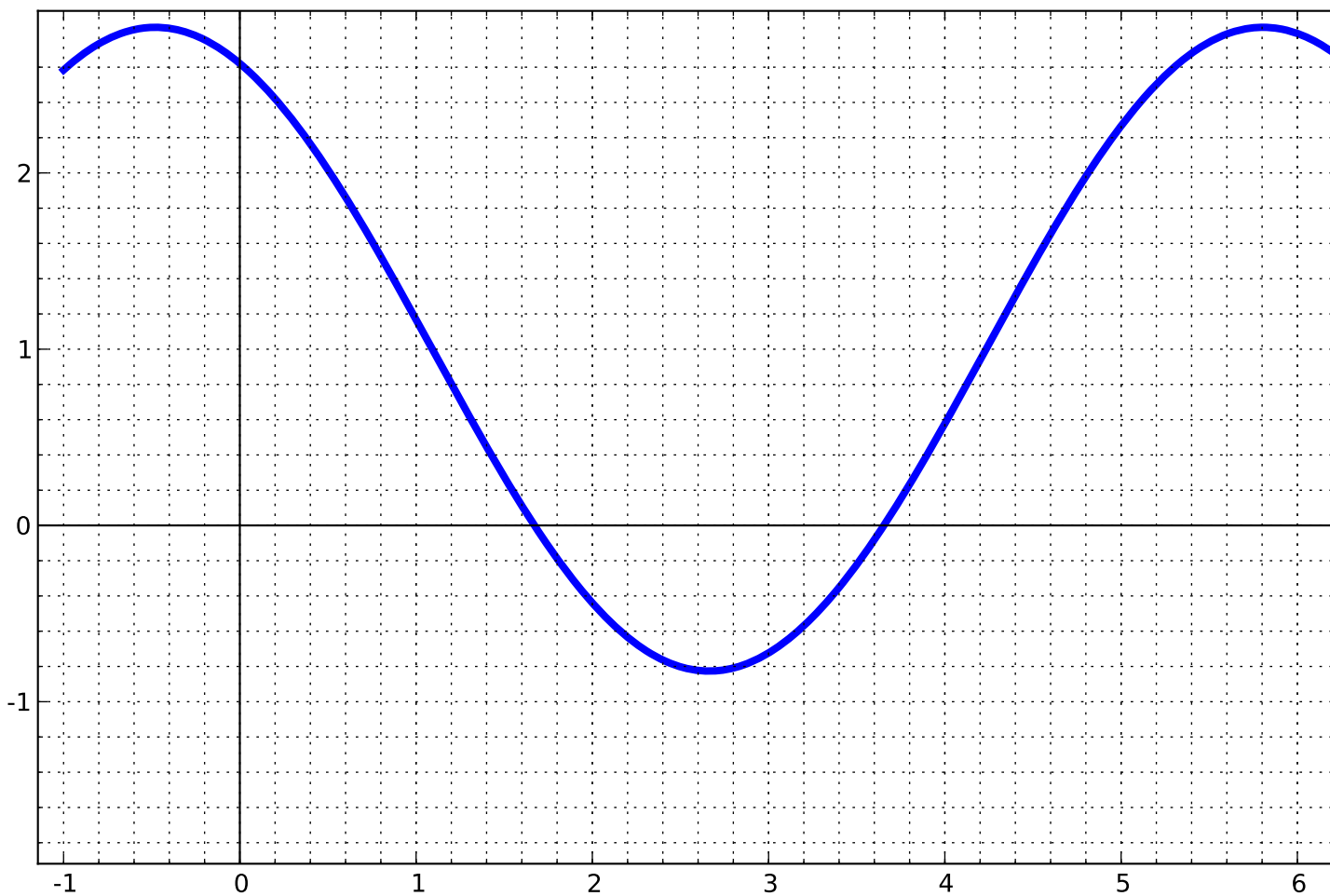
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Below is a plot of

$$f(x) = \sin(-x) + \sin(x) + \cos(-x + 1) + 2 \cos(x + 1) + 1.$$

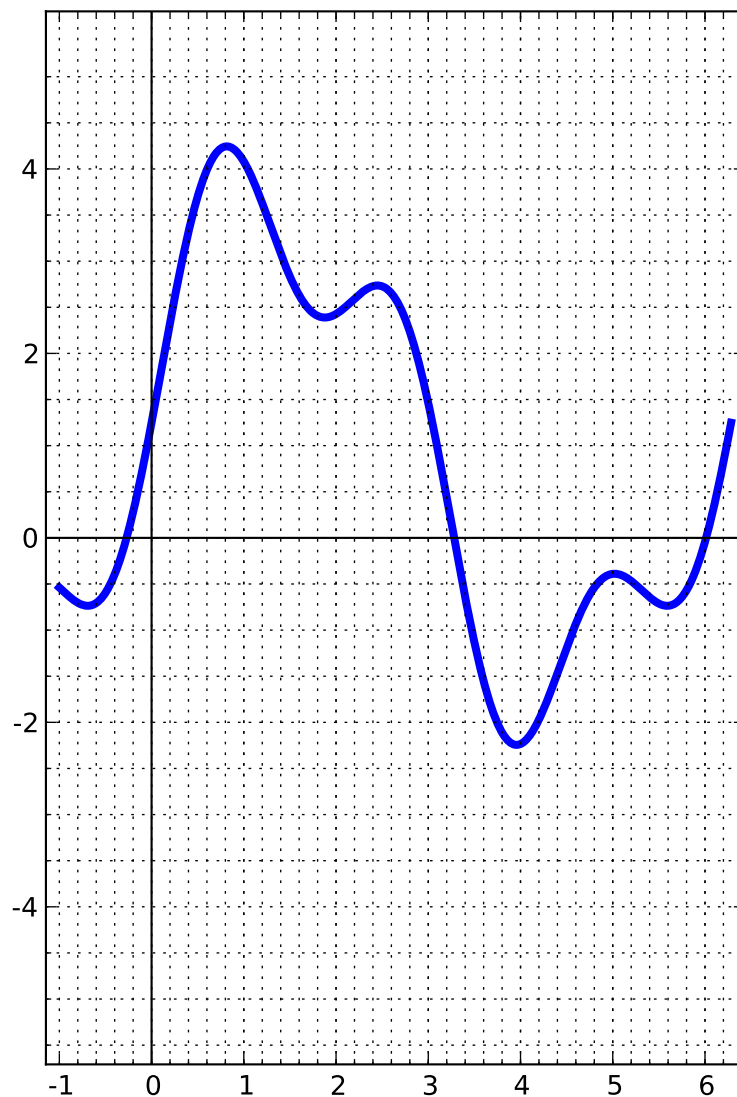
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Below is a plot of

$$f(x) = \cos(-3x + 2) + 2 \cos(-x + 1) + \cos(-x + 2) + 1.$$

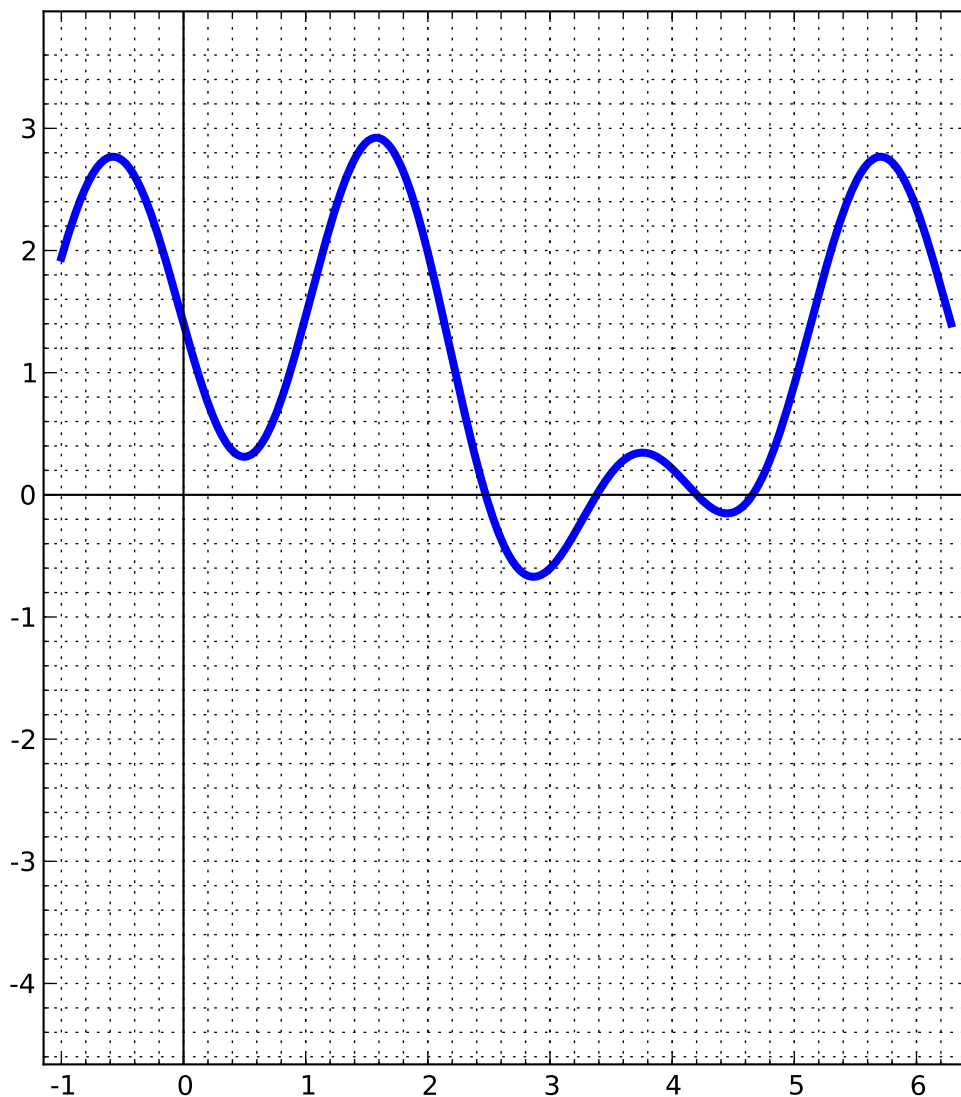
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Below is a plot of

$$f(x) = \sin(-2x + 2) + \sin(-x + 2) + \sin(-3x) + \cos(2x + 2) - \cos(-2x) + 1.$$

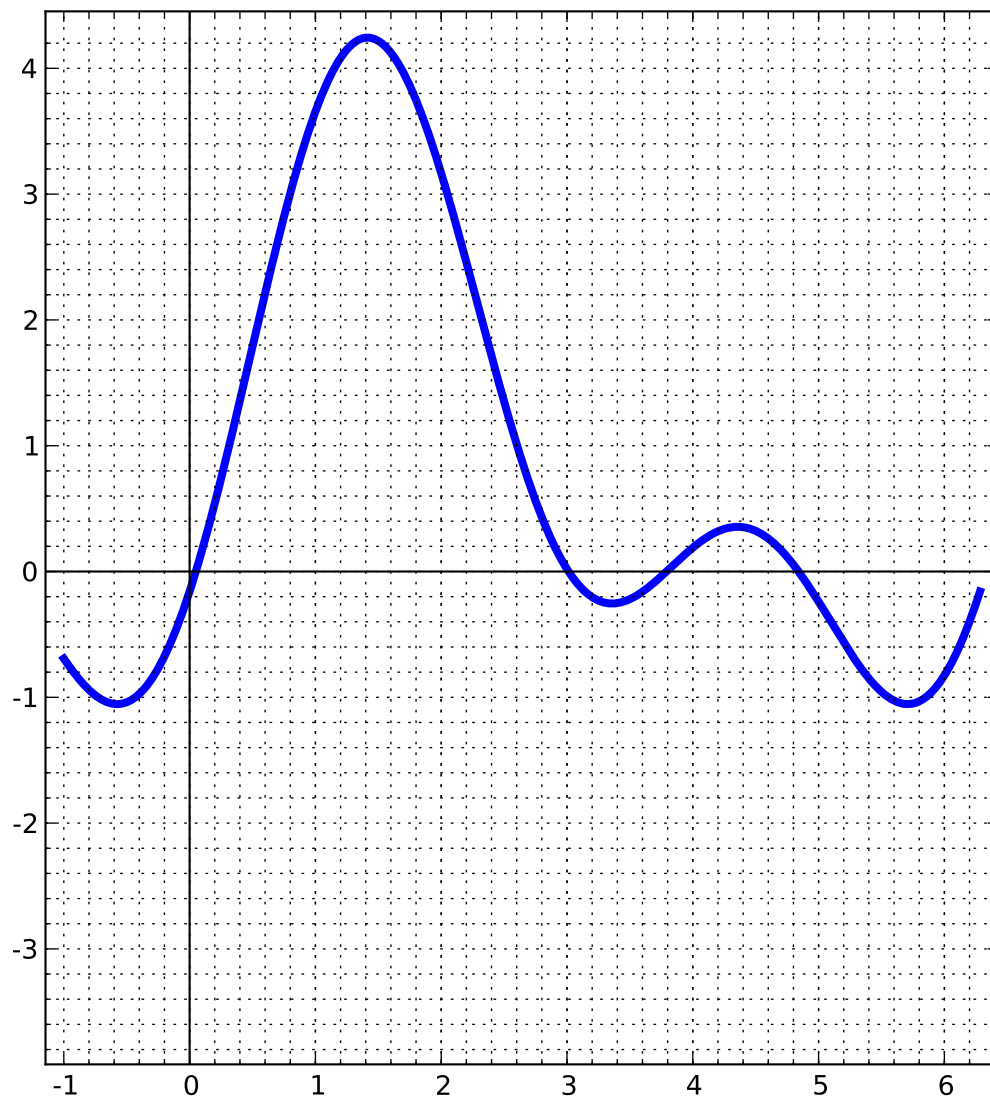
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$$f(x) = \sin(2x + 1) - 2 \sin(-x) - 2 \cos(2x) + 1.$$

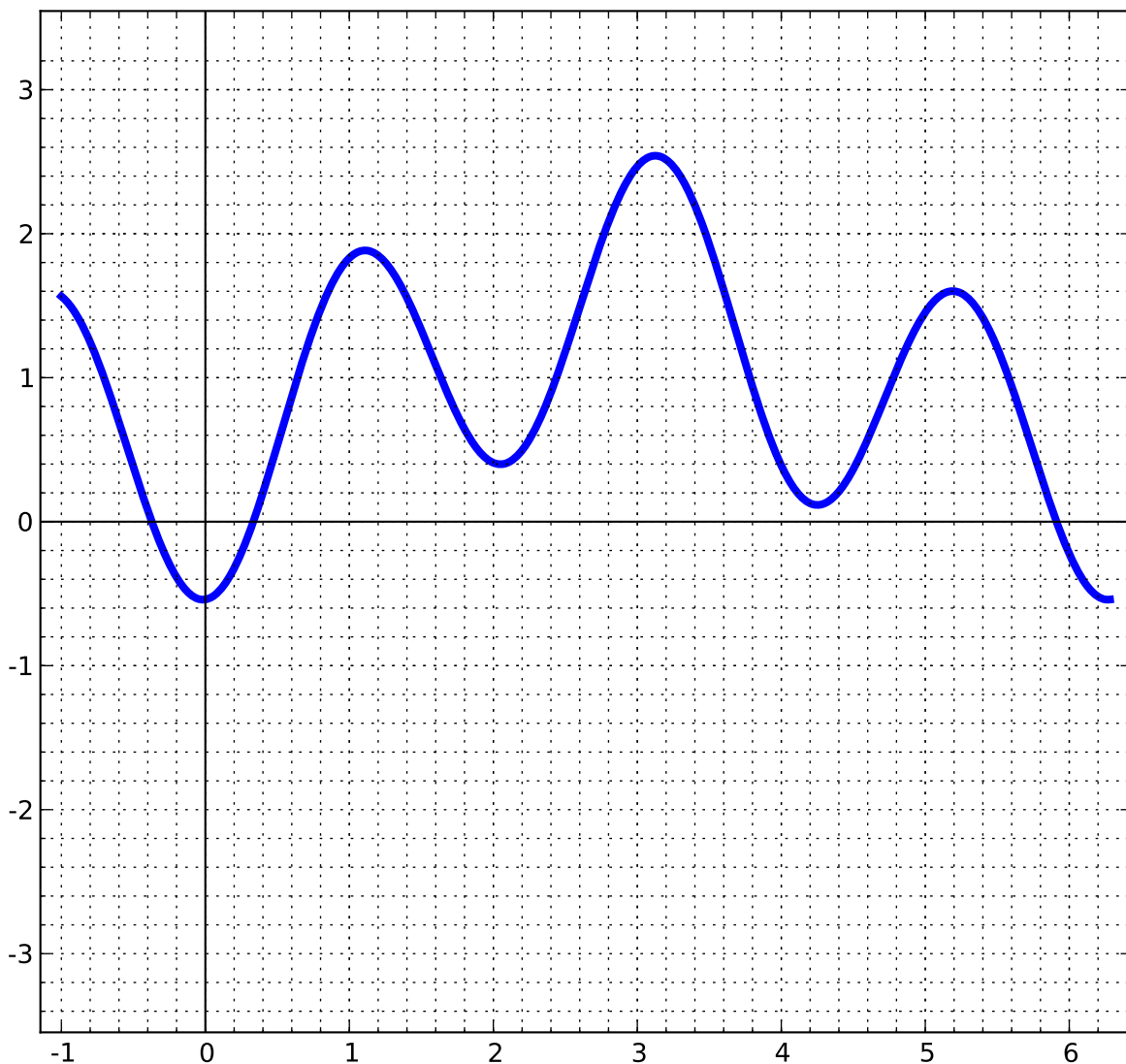
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$$f(x) = \sin(x) - \cos(-x + 1) - \cos(3x) + 1.$$

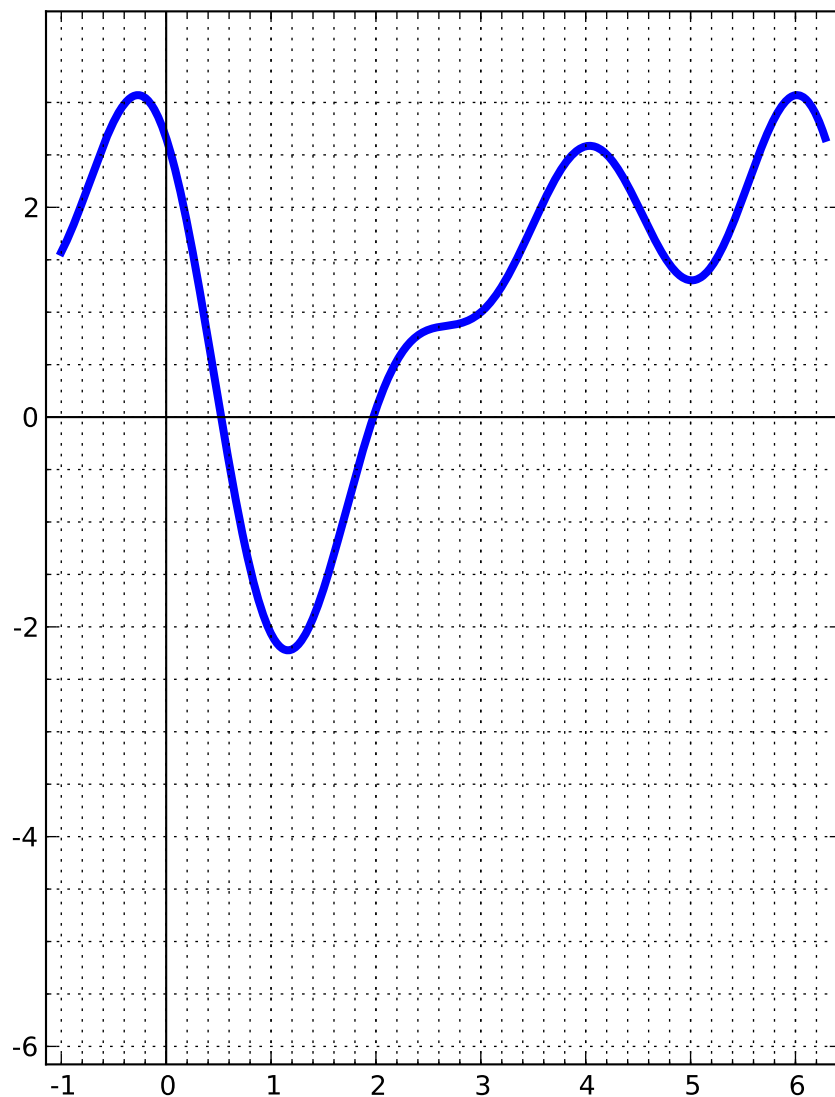
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Below is a plot of

$$f(x) = \sin(2x + 2) + 2 \sin(-3x) - 2 \cos(-x + 1) - 2 \cos(3x + 2) + \cos(-x) + 1.$$

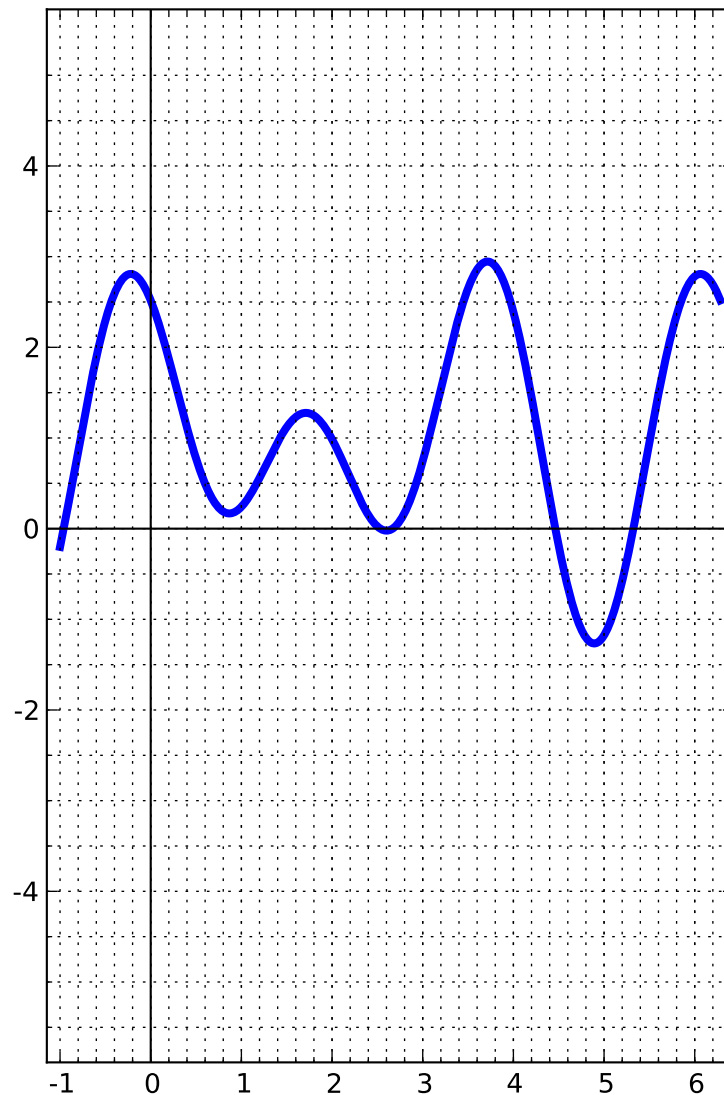
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Below is a plot of

$$f(x) = \sin(-2x + 2) - \sin(3x + 1) + \sin(3x + 2) - \sin(3x) + \cos(-3x + 1) + 1.$$

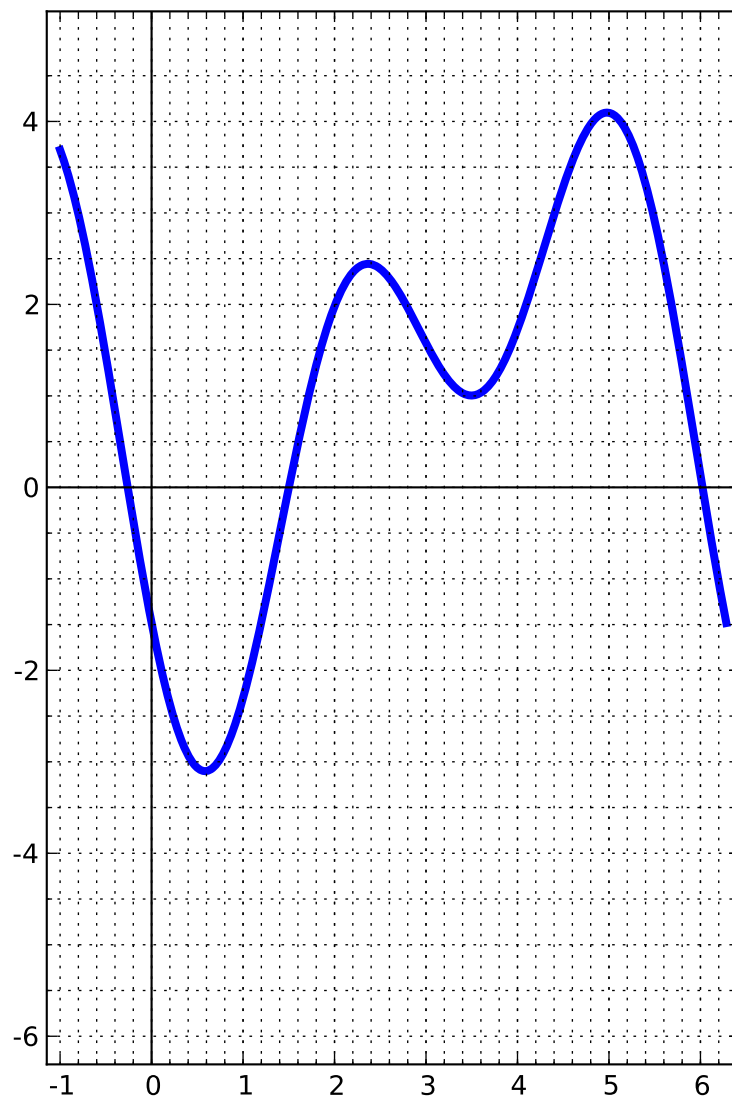
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Below is a plot of

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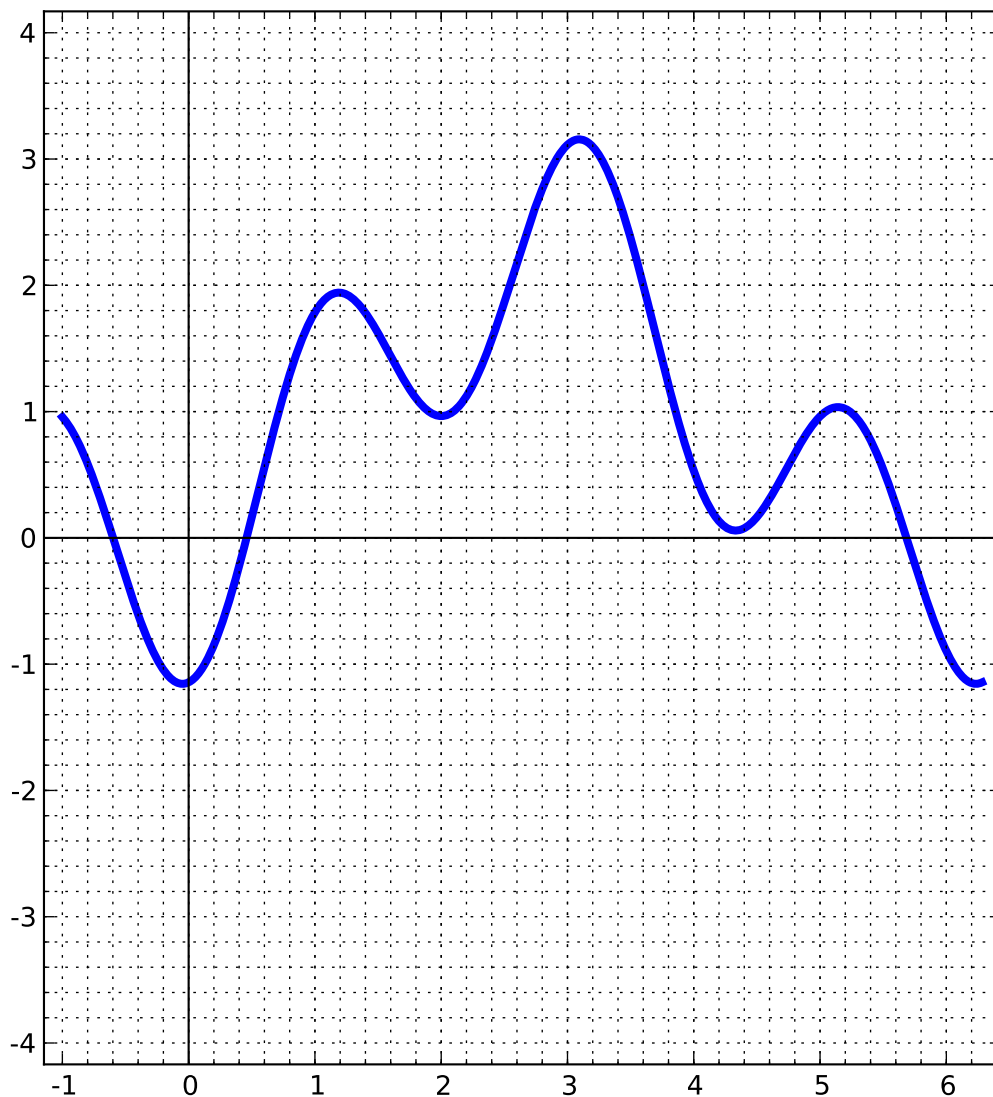
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$$f(x) = -2 \sin(-x + 2) - \sin(x + 2) + \cos(-x + 2) - \cos(3x) + 2 \cos(x) + 1.$$

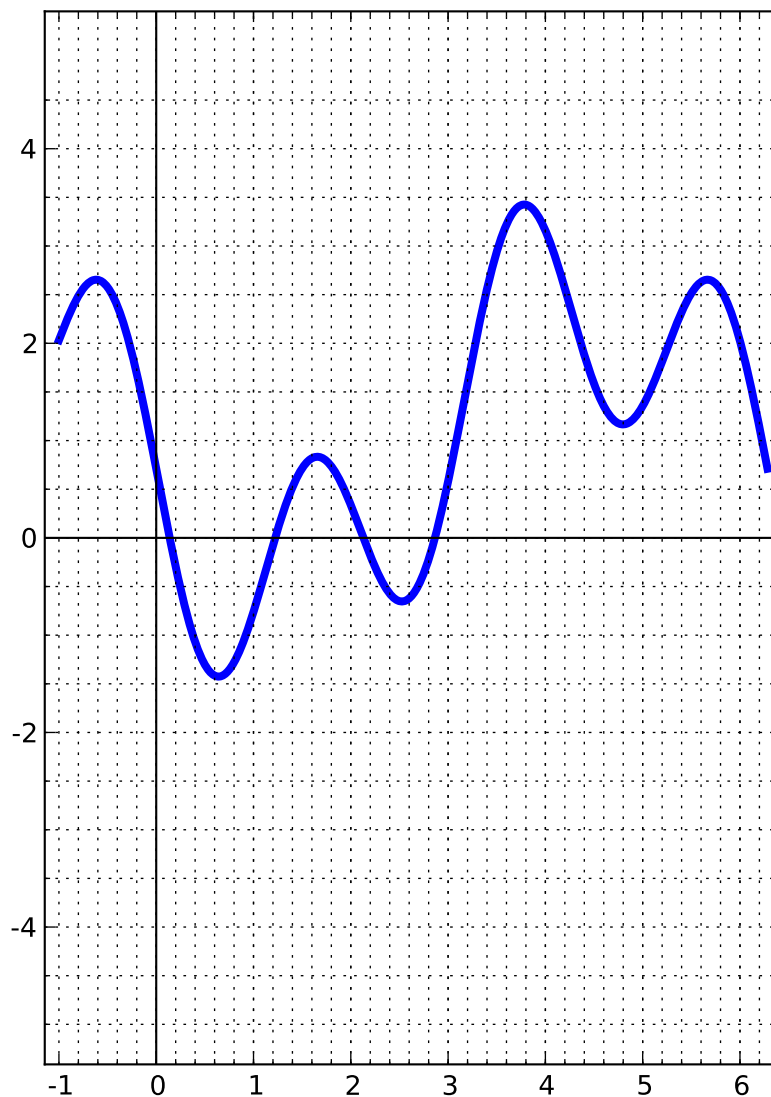
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Below is a plot of

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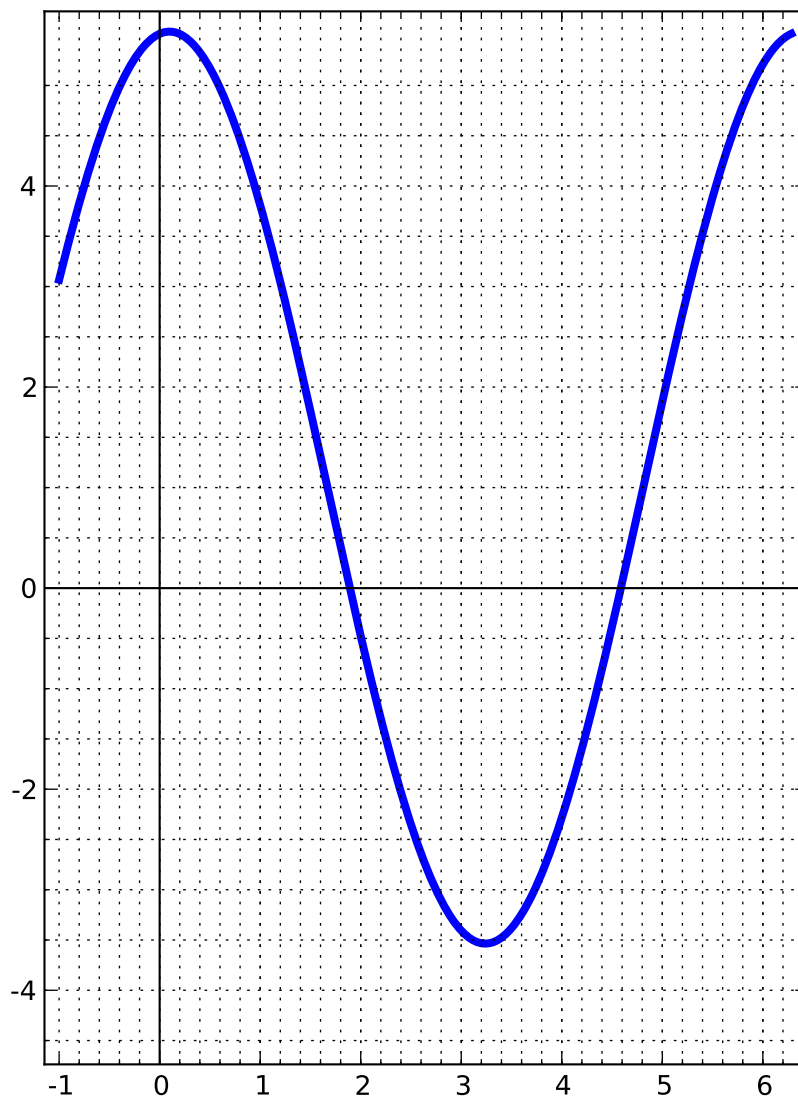
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Below is a plot of

$$f(x) = \sin(-x + 1) + 2 \sin(x + 1) + \sin(x + 2) - 2 \sin(-x) + 2 \cos(x + 1) + 1.$$

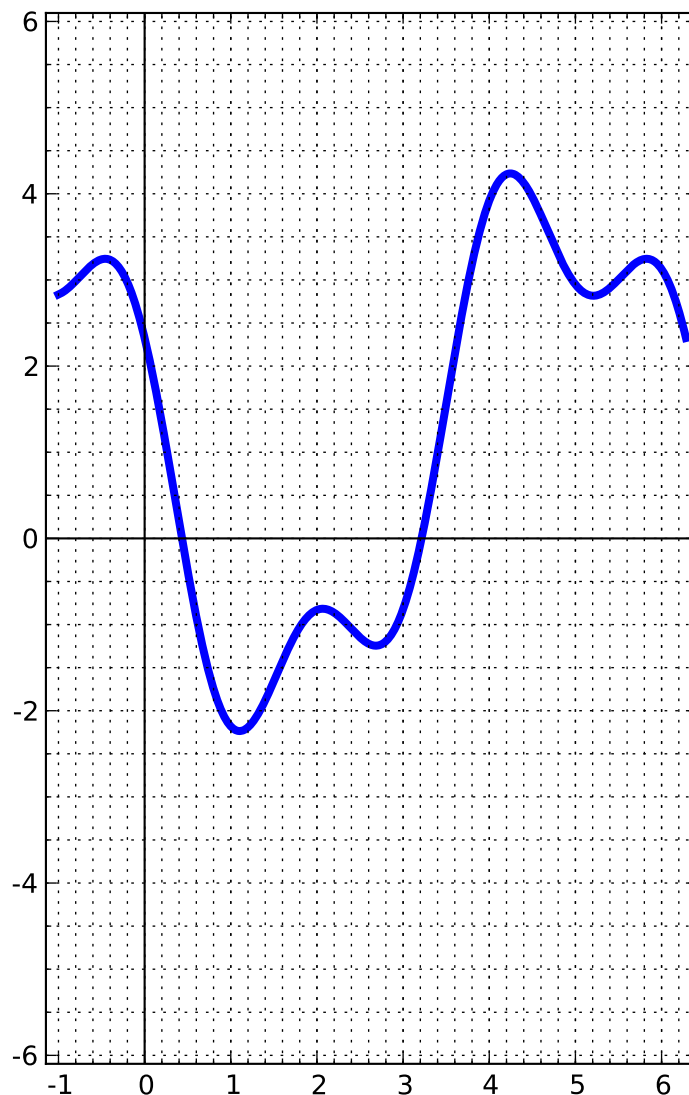
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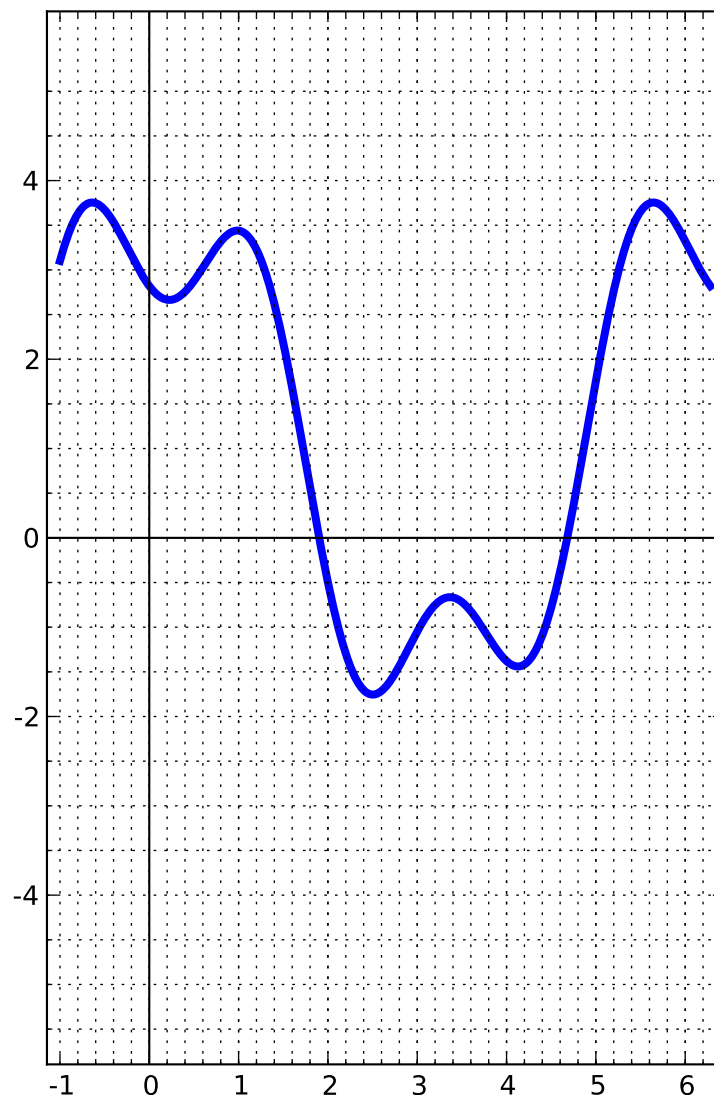
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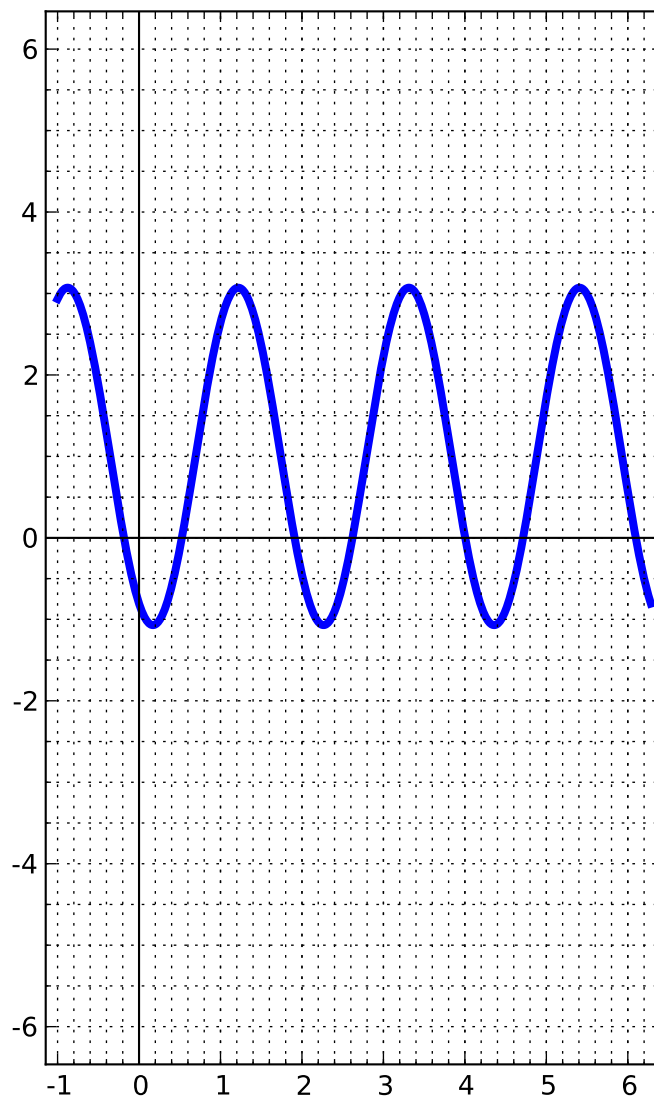
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Below is a plot of

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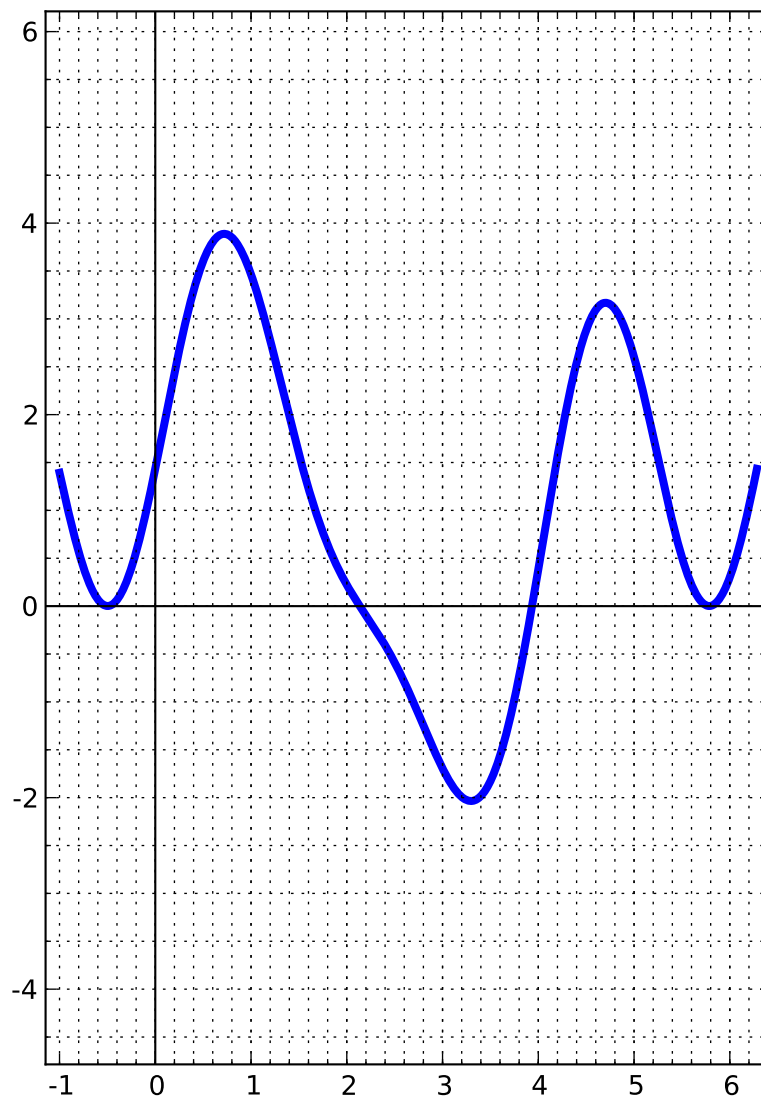
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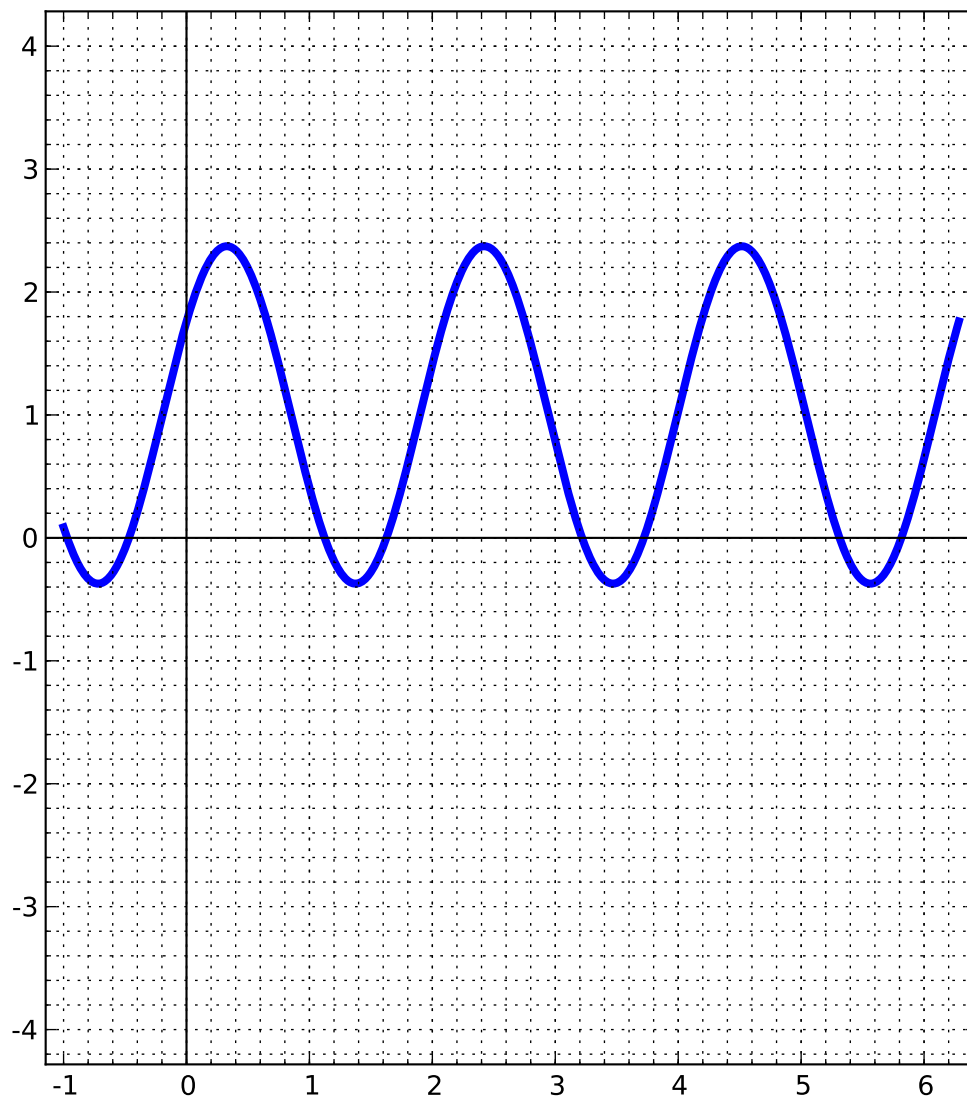
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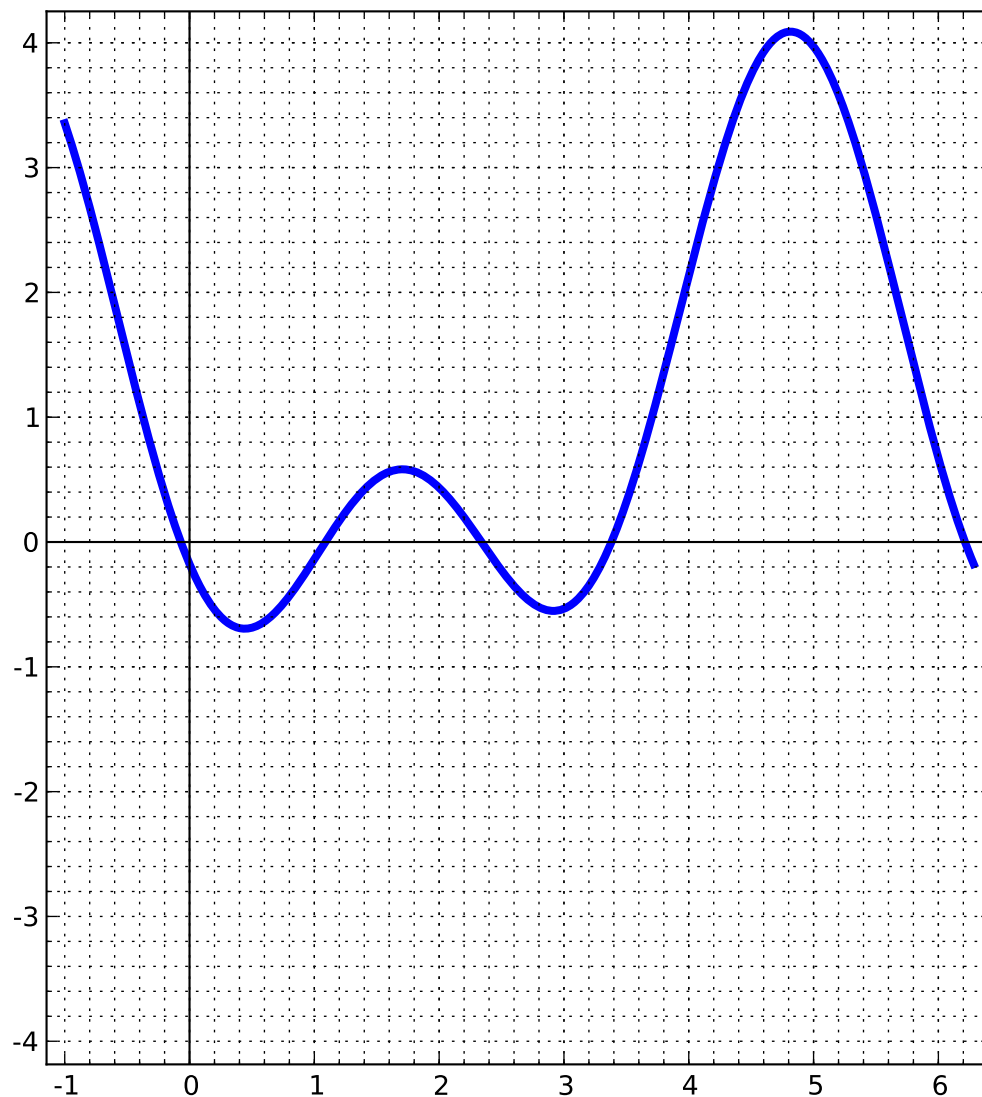
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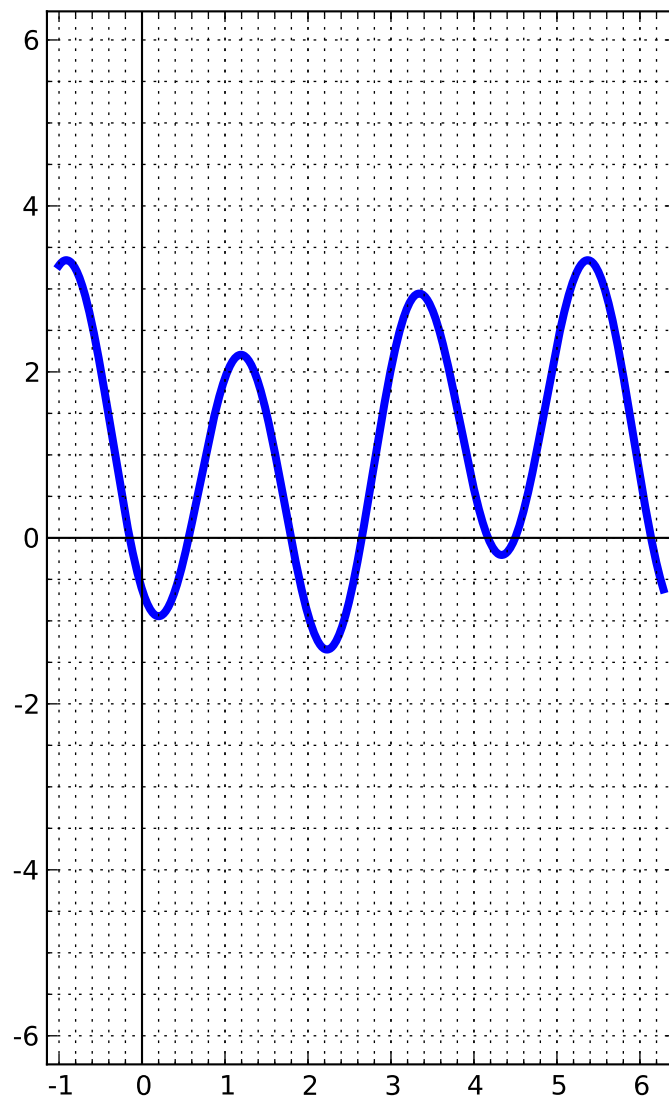
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Below is a plot of

$$f(x) = -2 \sin(-x + 2) + 2 \sin(x + 2) + \sin(x) - 2 \cos(-3x + 1) - \cos(3x + 1) + 1.$$

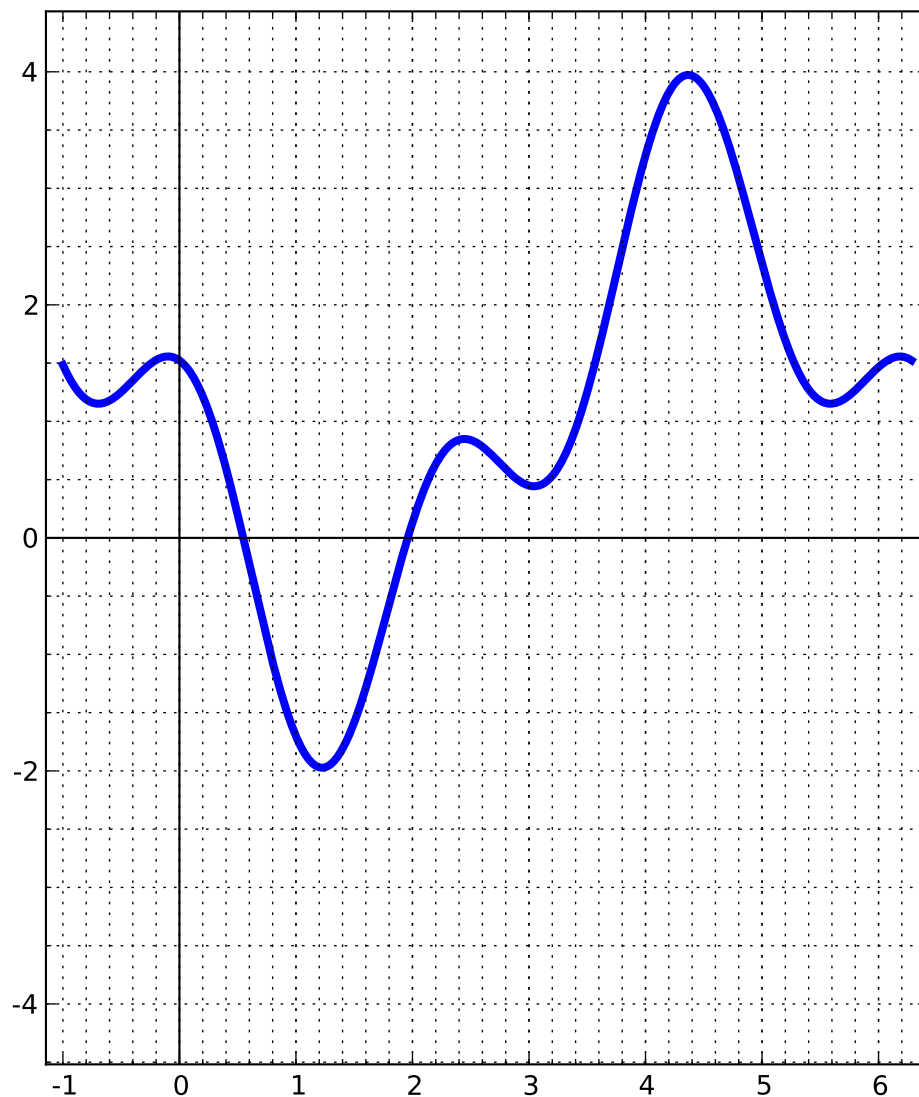
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = \sin(-3x + 2) + 2 \sin(-x + 2) - \cos(x + 1) + 4 \cos(x + 2) + 1.$$

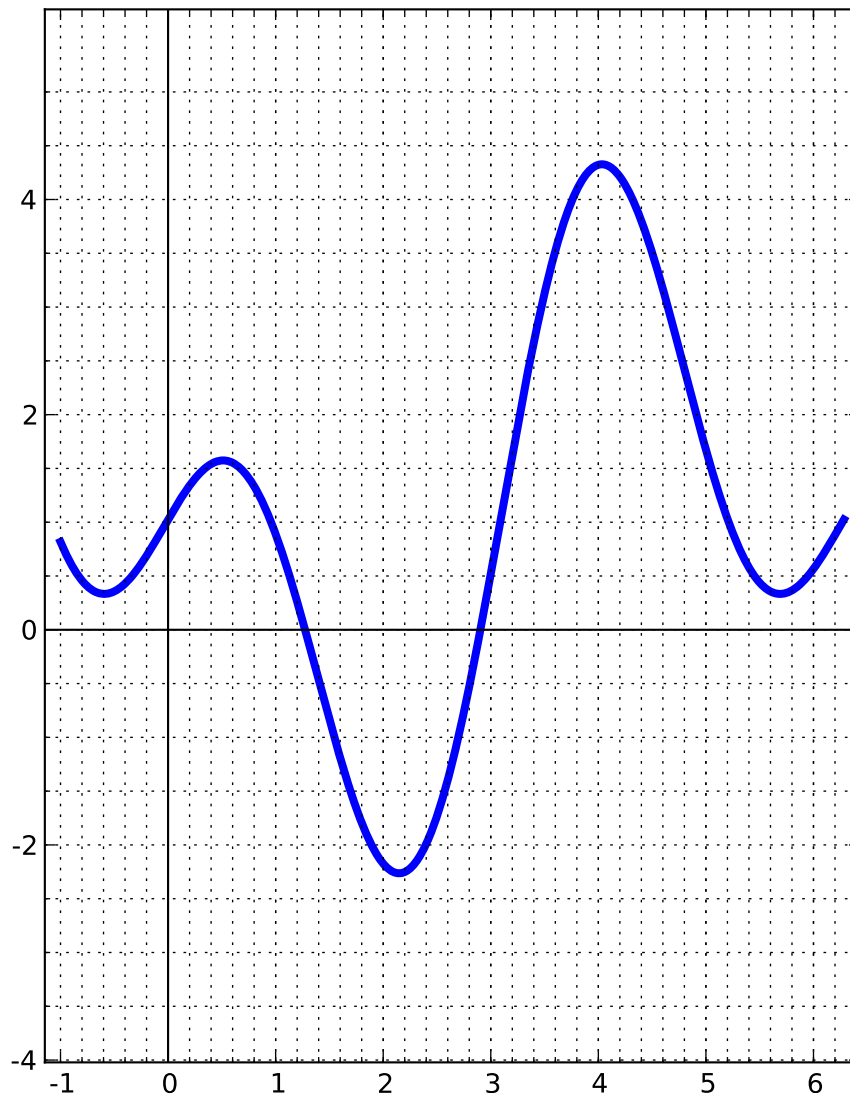
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Below is a plot of

$$f(x) = -2 \sin(x + 1) + 2 \cos(-2x + 2) + \cos(x + 1) + \cos(-x) + \cos(2x) + 1.$$

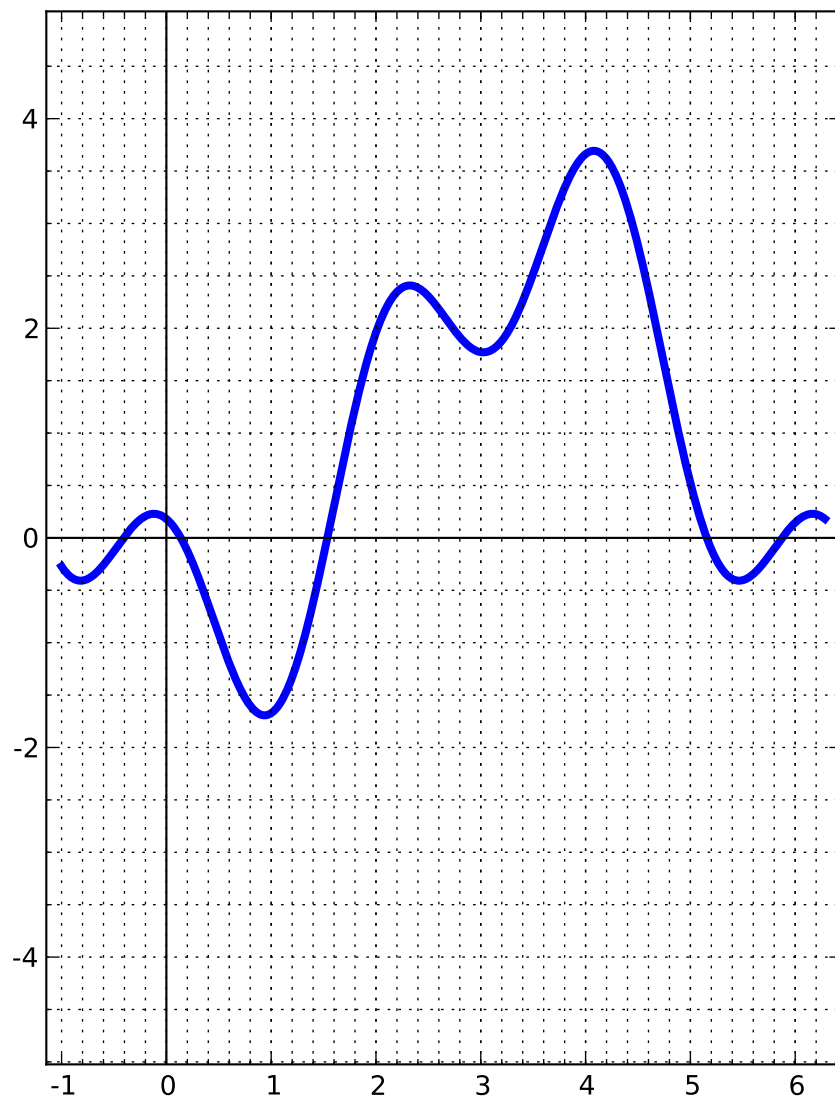
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Below is a plot of

$$f(x) = -2 \sin(-x + 2) - \cos(-2x) + \cos(2x) + \cos(3x) + 1.$$

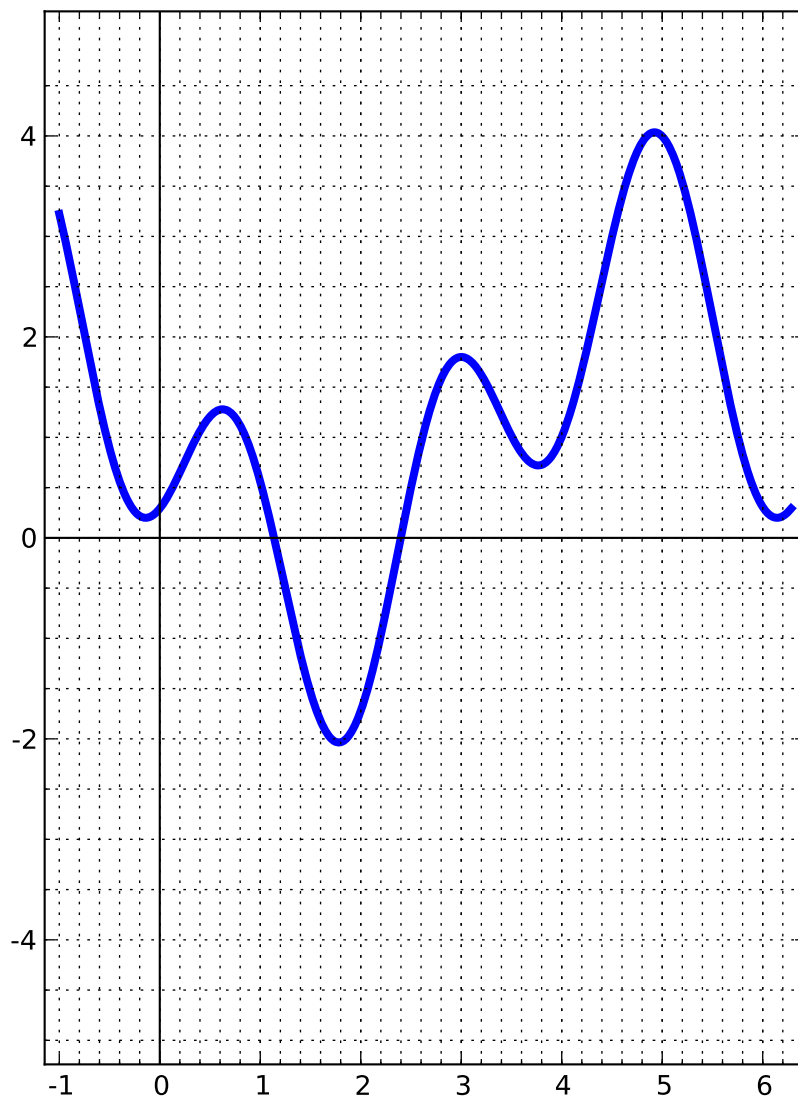
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Below is a plot of

$$f(x) = -\sin(-3x) + \cos(-3x + 2) + \cos(x + 1) + \cos(x + 2) + \cos(3x + 2) + 1.$$

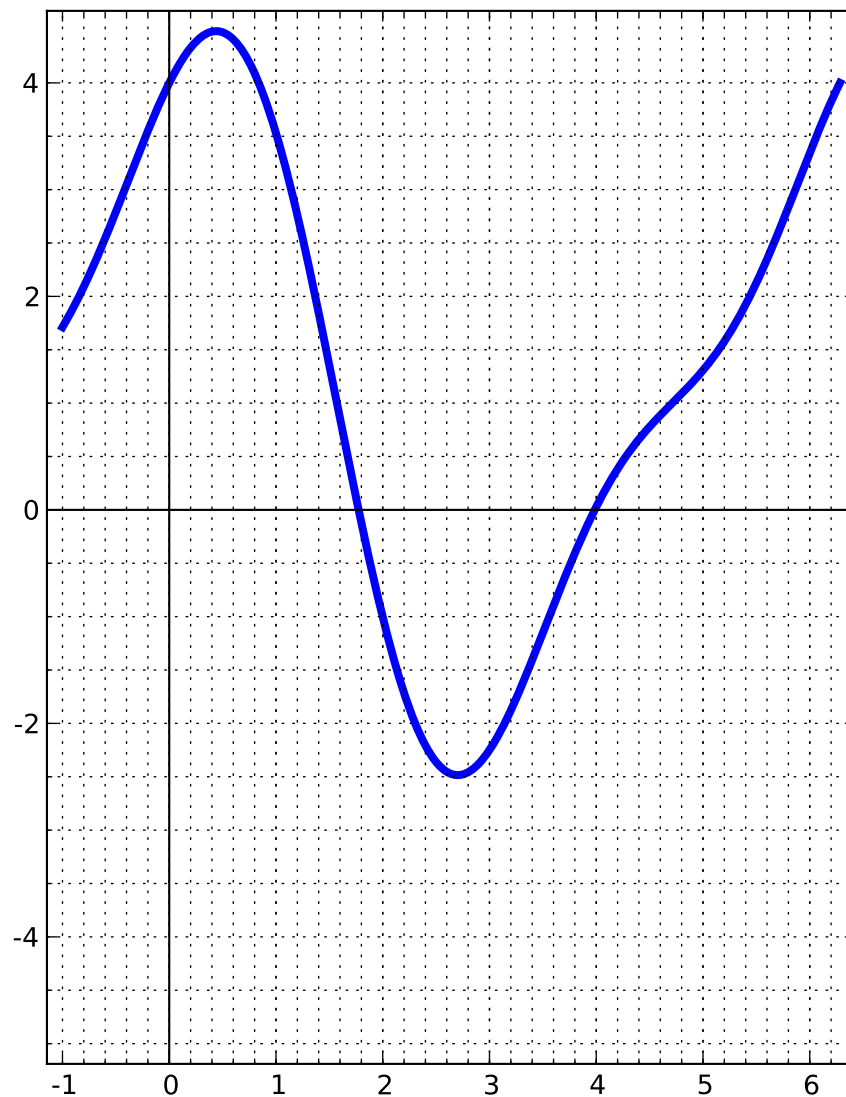
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Below is a plot of

$$f(x) = -\sin(-2x) + 3\cos(x) + 1.$$

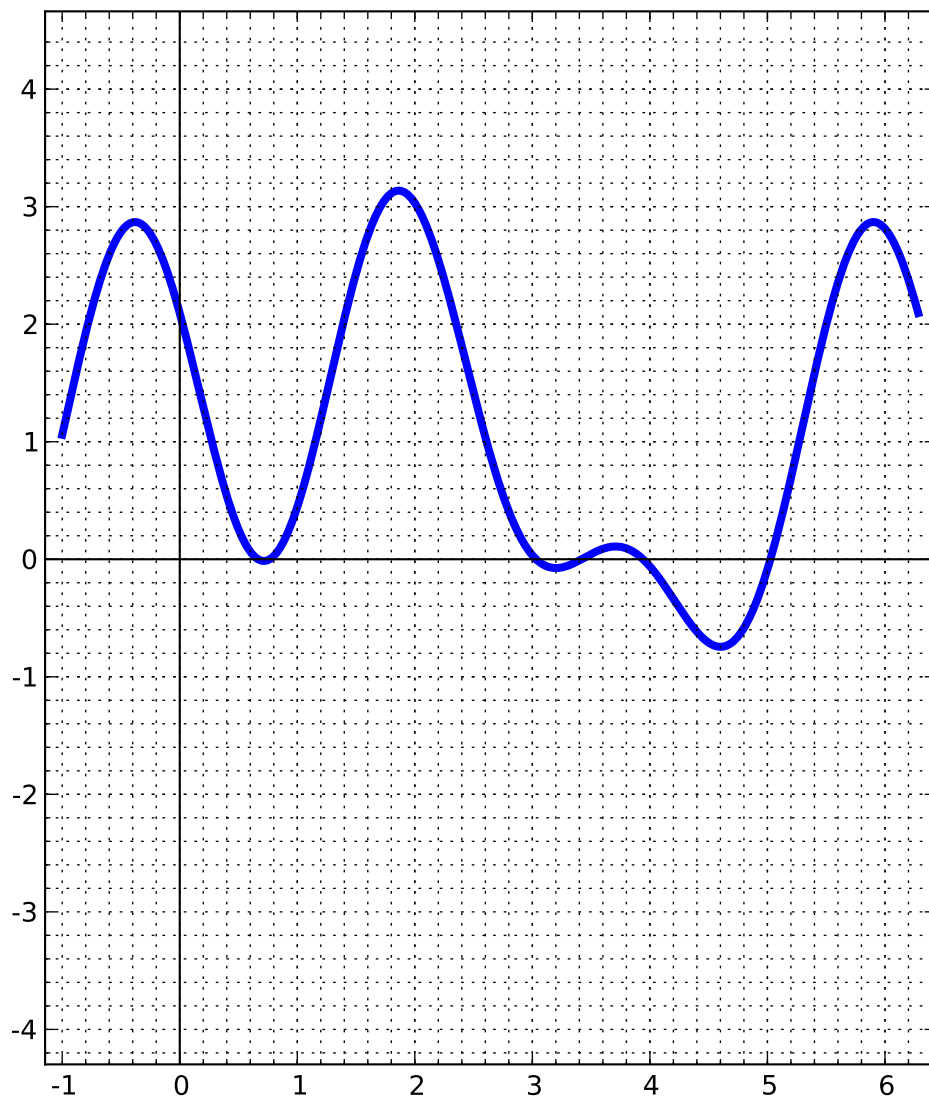
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Below is a plot of

$$f(x) = -2 \sin(2x + 2) - 2 \cos(-2x + 2) + \cos(-x + 1) + \cos(3x + 1) + \cos(-2x) + 1.$$

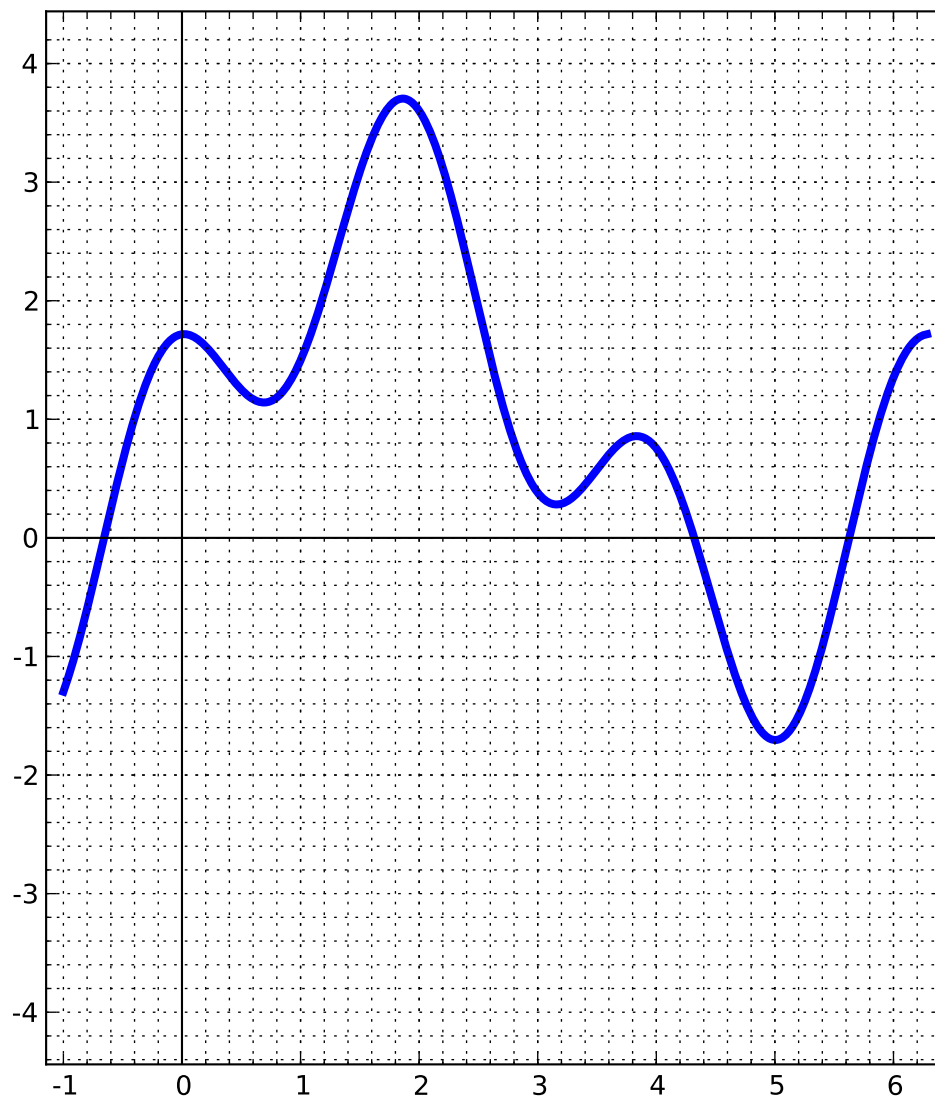
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Below is a plot of

$$f(x) = \sin(-3x + 1) - \cos(x + 1) - \cos(x + 2) + 1.$$

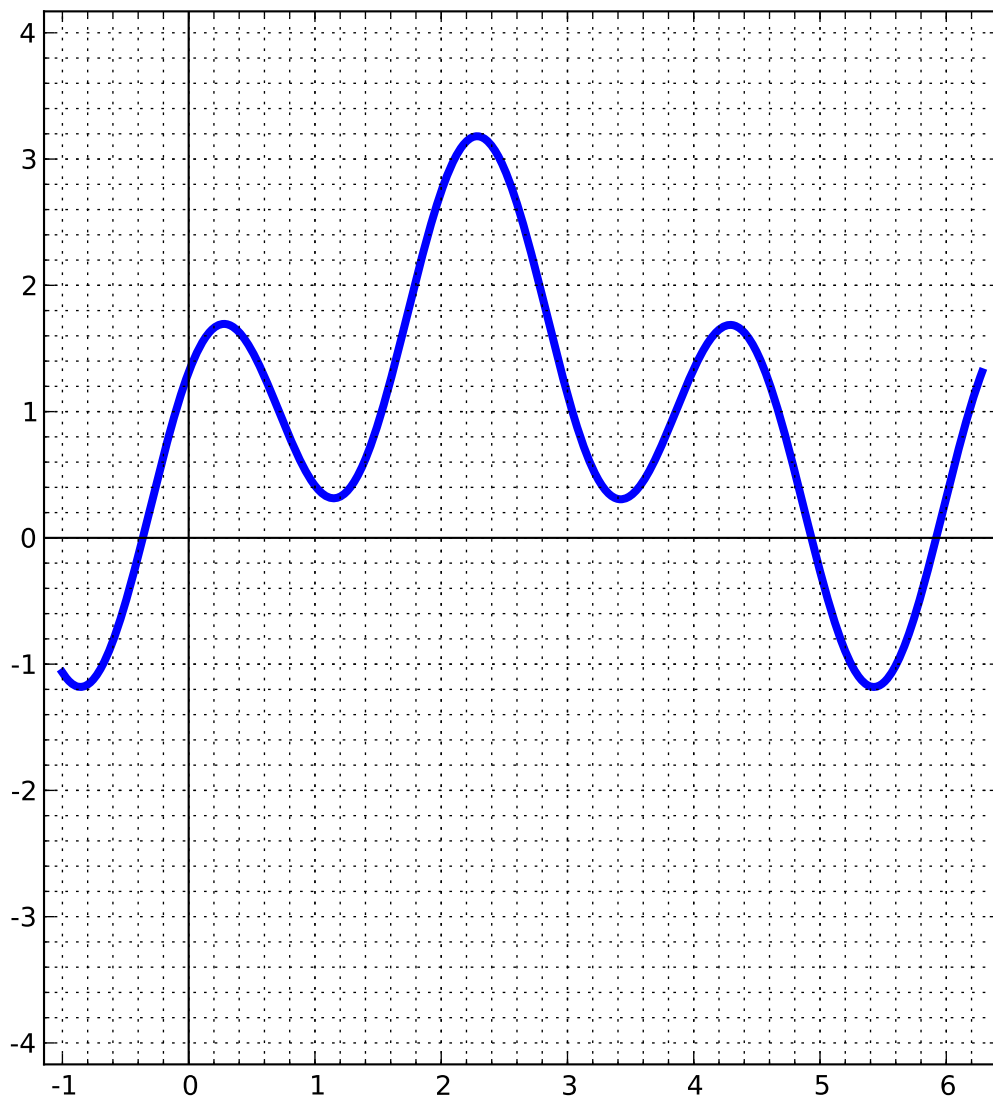
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Below is a plot of

$$f(x) = -\sin(3x + 1) + 2\sin(3x + 2) + 2\sin(3x) - \cos(-x + 2) - 2\cos(x + 1) + 1.$$

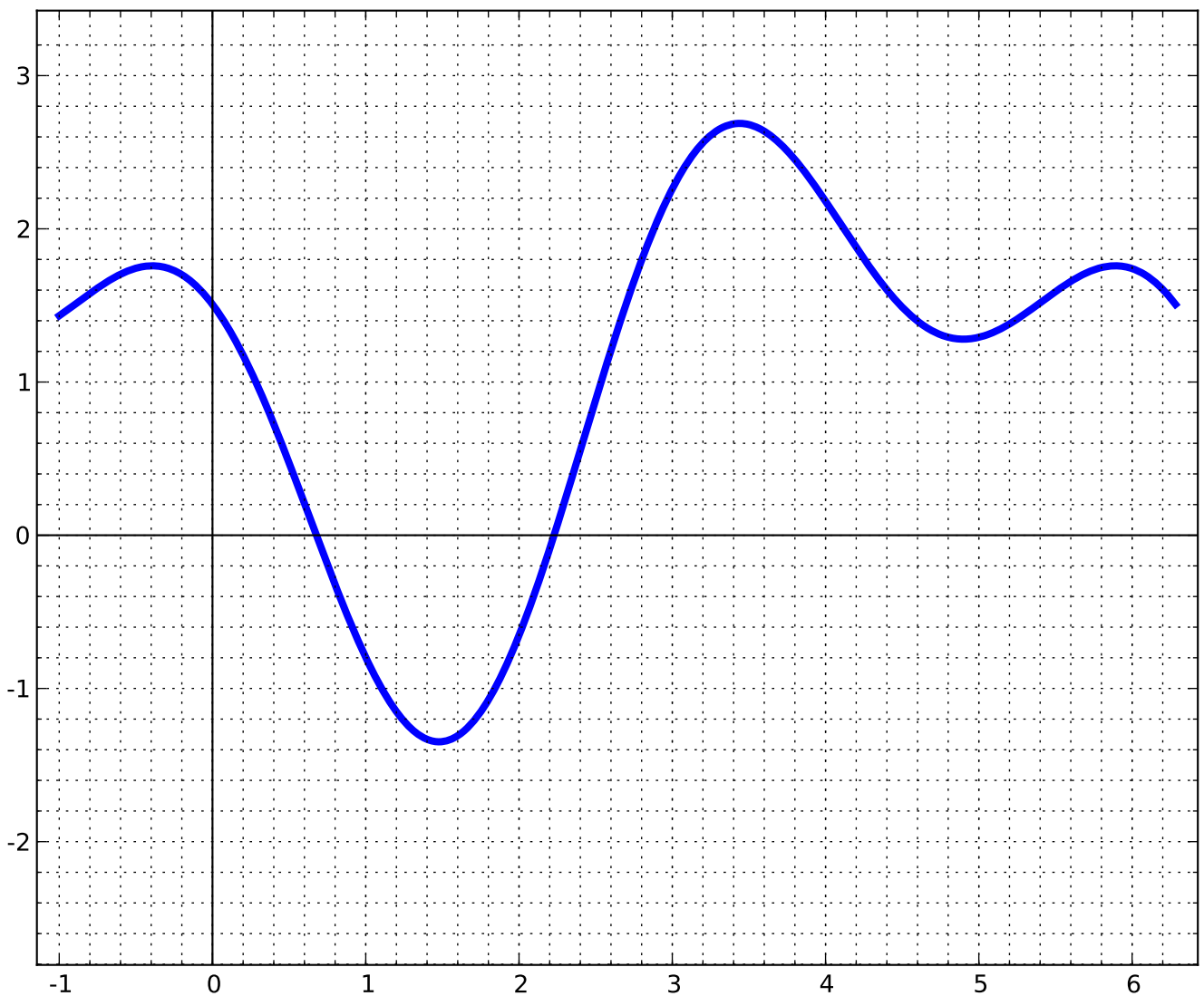
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Below is a plot of

$$f(x) = -\sin(-x+2) - \cos(-x+2) - \cos(-2x) + 2\cos(2x) + 1.$$

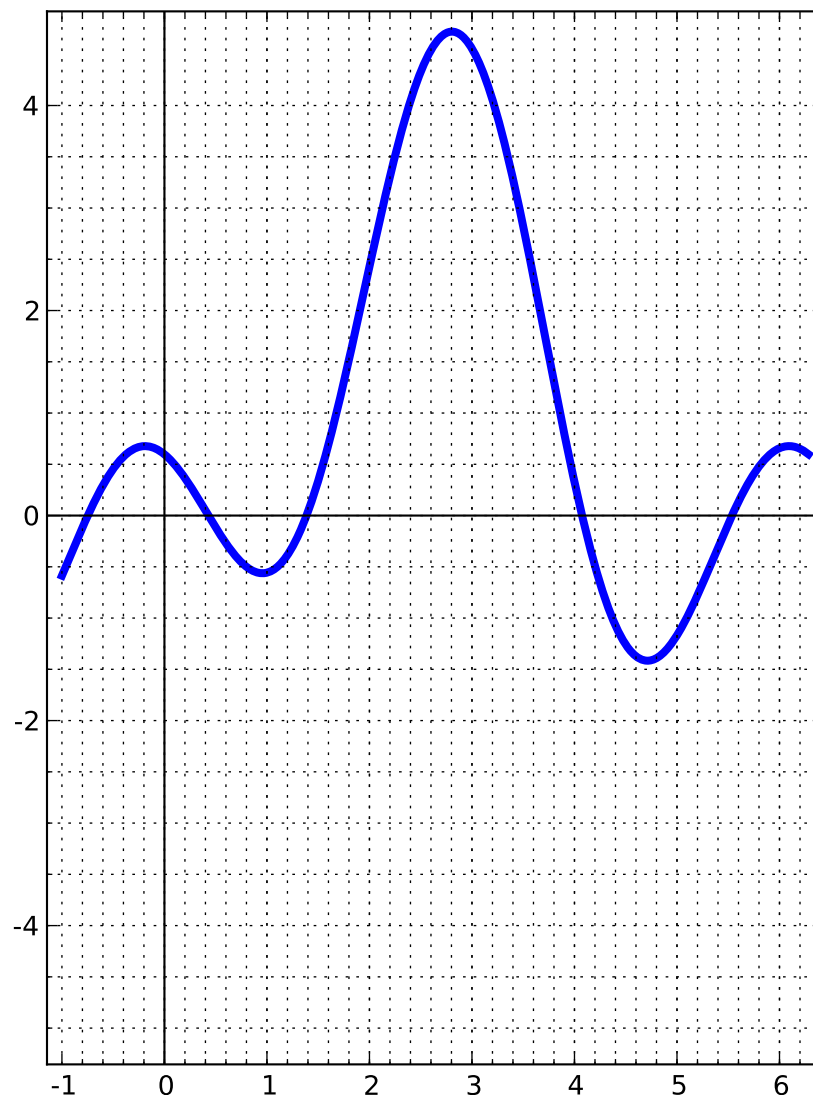
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Below is a plot of

$$f(x) = -\sin(-x+2) - \sin(x+2) - \sin(-x) - \cos(-2x+2) + \cos(2x) + 1.$$

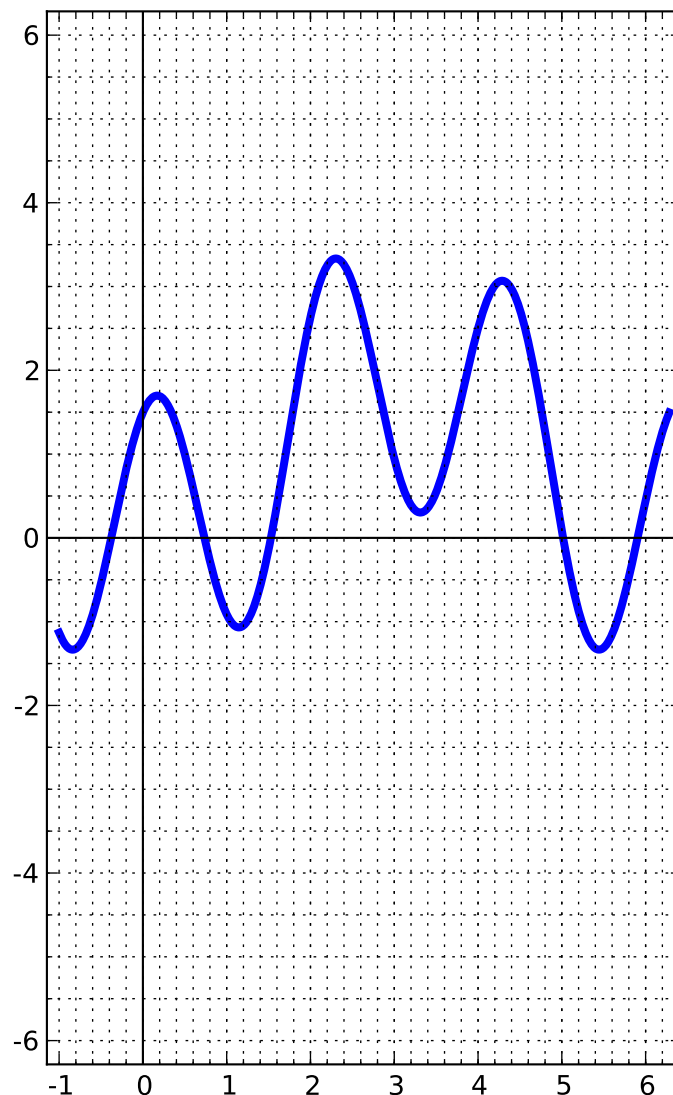
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Below is a plot of

$$f(x) = 2 \cos(-3x + 1) - \cos(-3x + 2) - 2 \cos(-3x) + 2 \cos(3x) - \cos(x) + 1.$$

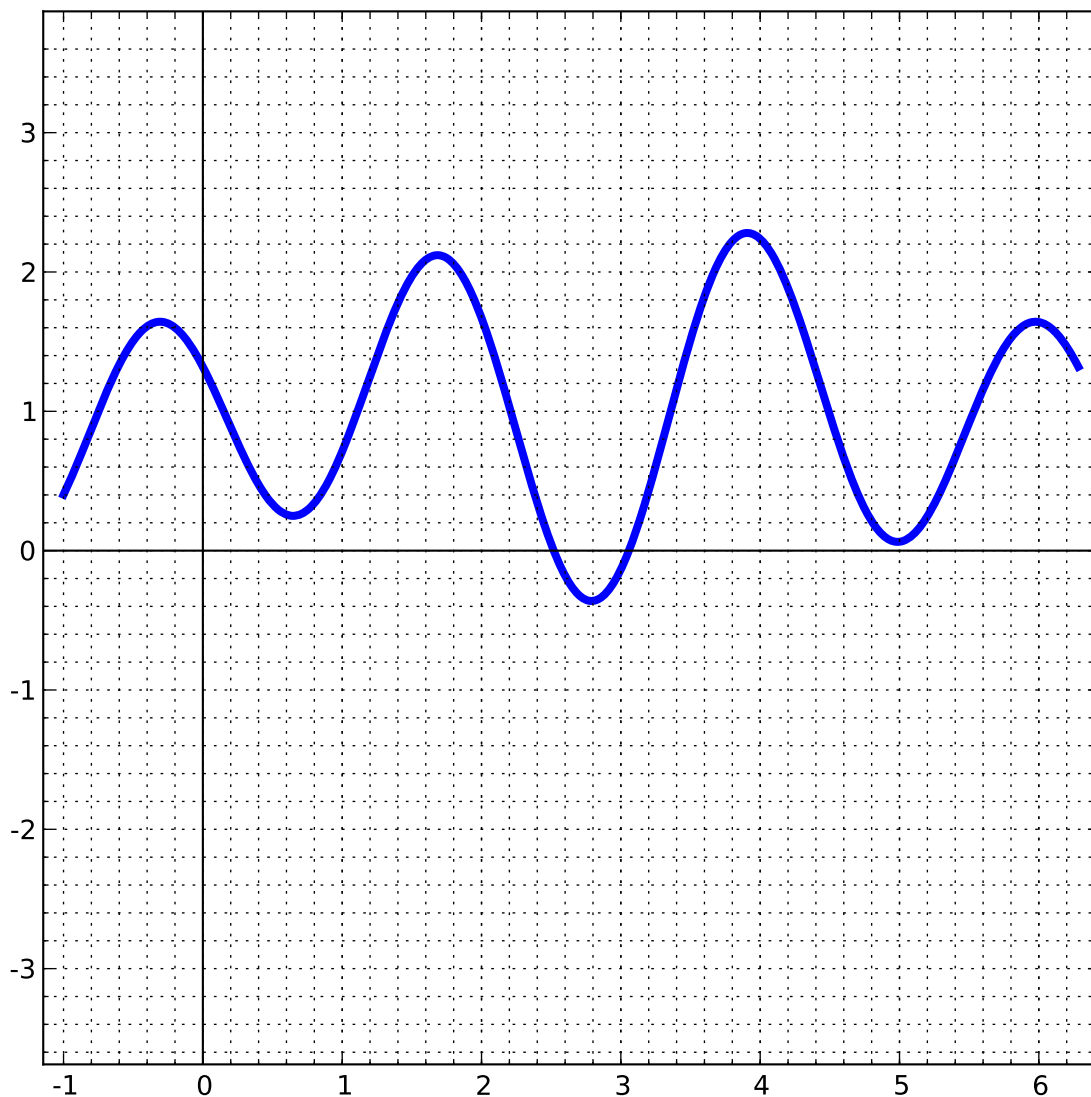
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Below is a plot of

$$f(x) = -\sin(2x + 1) + 2\cos(-2x + 1) + \cos(2x + 1) + \cos(3x + 1) - \cos(2x) + 1.$$

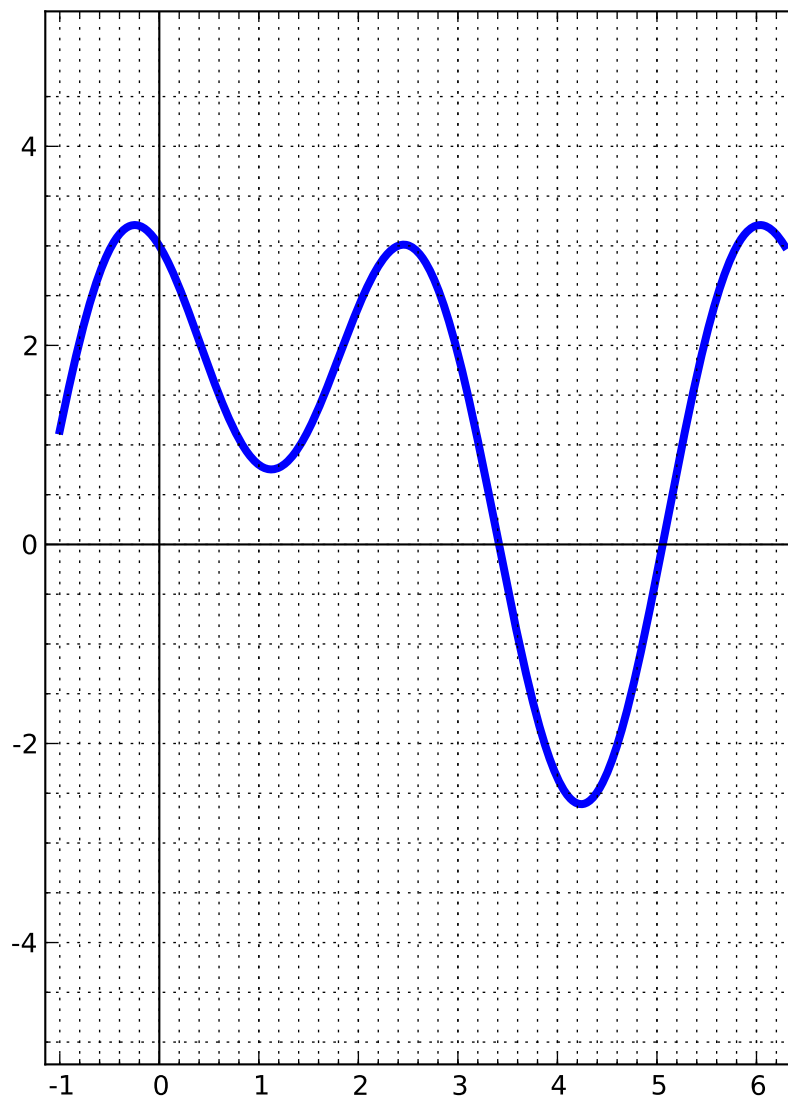
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Below is a plot of

$$f(x) = \sin(-x + 1) - \sin(2x + 1) + \sin(-2x) + 2\sin(x) + 2\cos(-2x) + 1.$$

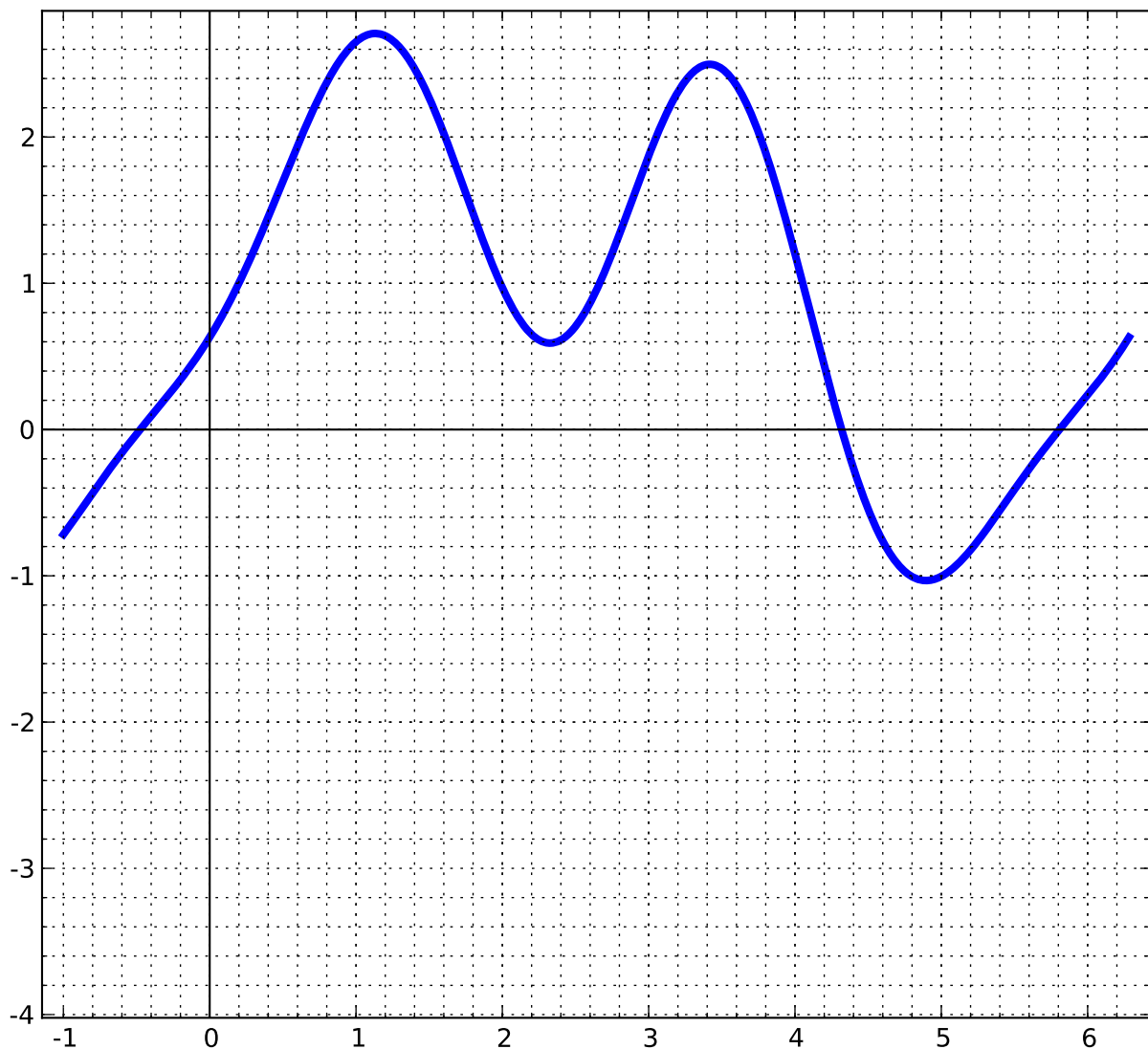
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Below is a plot of

$$f(x) = -\sin(3x + 2) - 2\sin(-x) + \cos(x + 2) - \cos(2x + 2) + \cos(3x + 1) + 1.$$

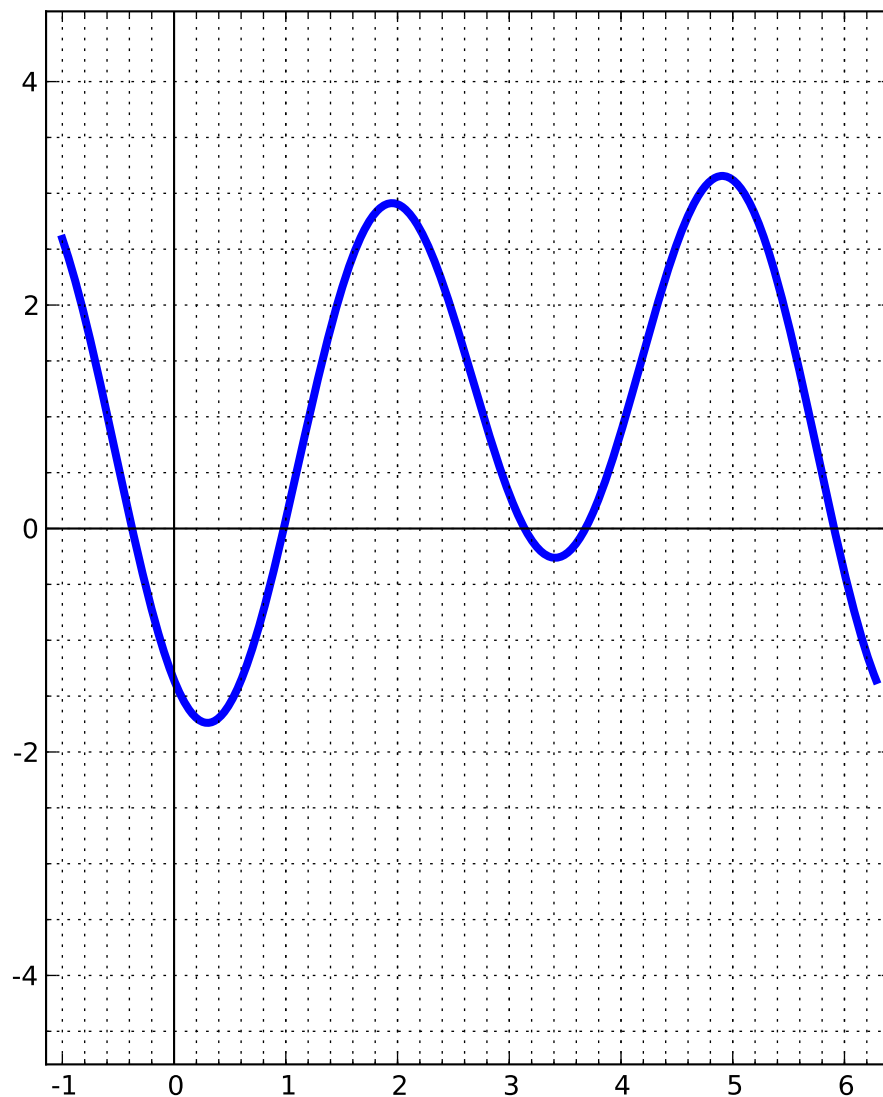
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Below is a plot of

$$f(x) = \sin(x + 2) - 2 \sin(2x + 1) - \sin(-x) - \cos(-x + 2) - 2 \cos(x) + 1.$$

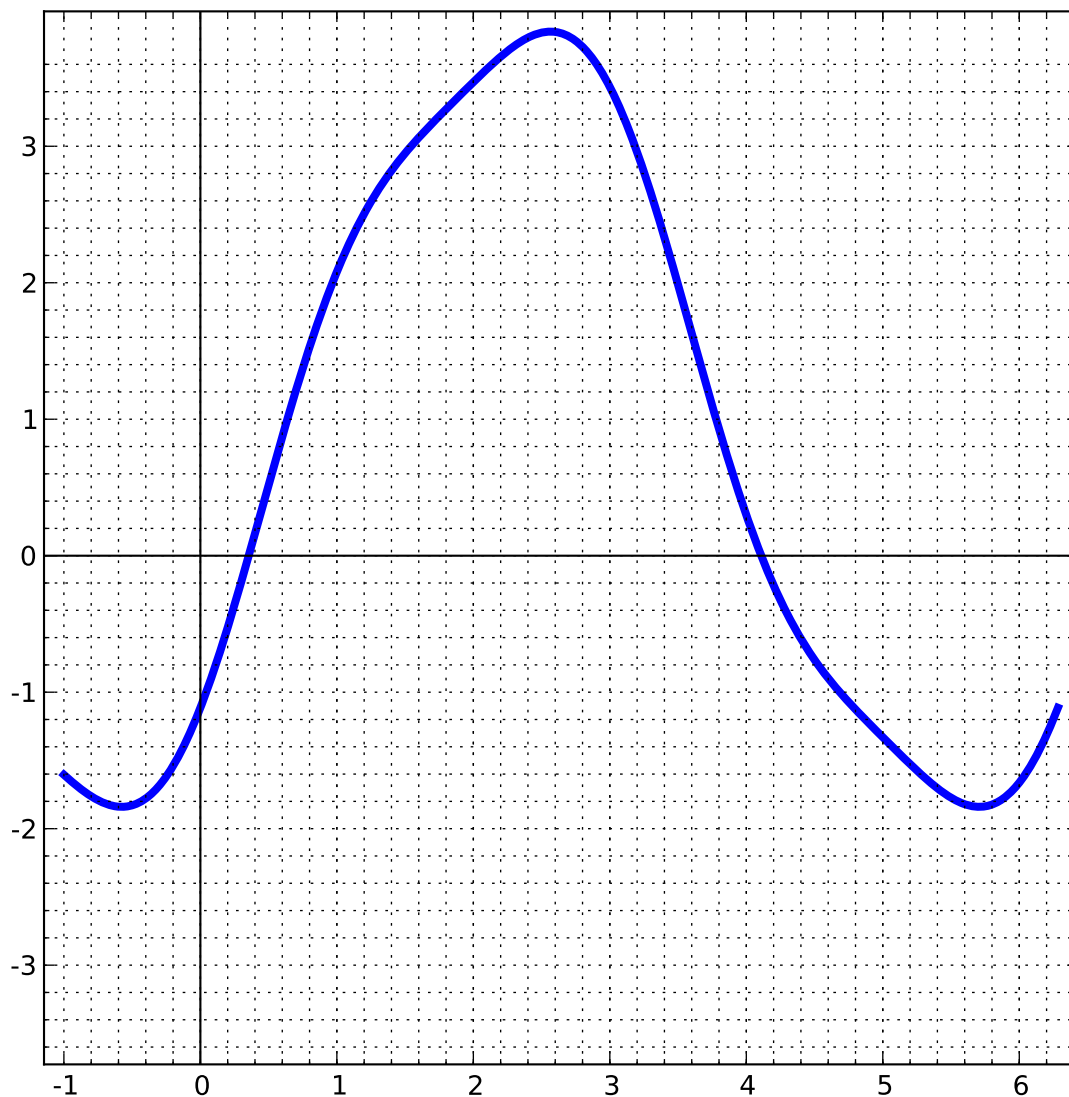
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Below is a plot of

$$f(x) = -\sin(x+2) - 2\cos(-3x+1) + \cos(-x+2) - \cos(x+1) - 2\cos(3x+2) + 1.$$

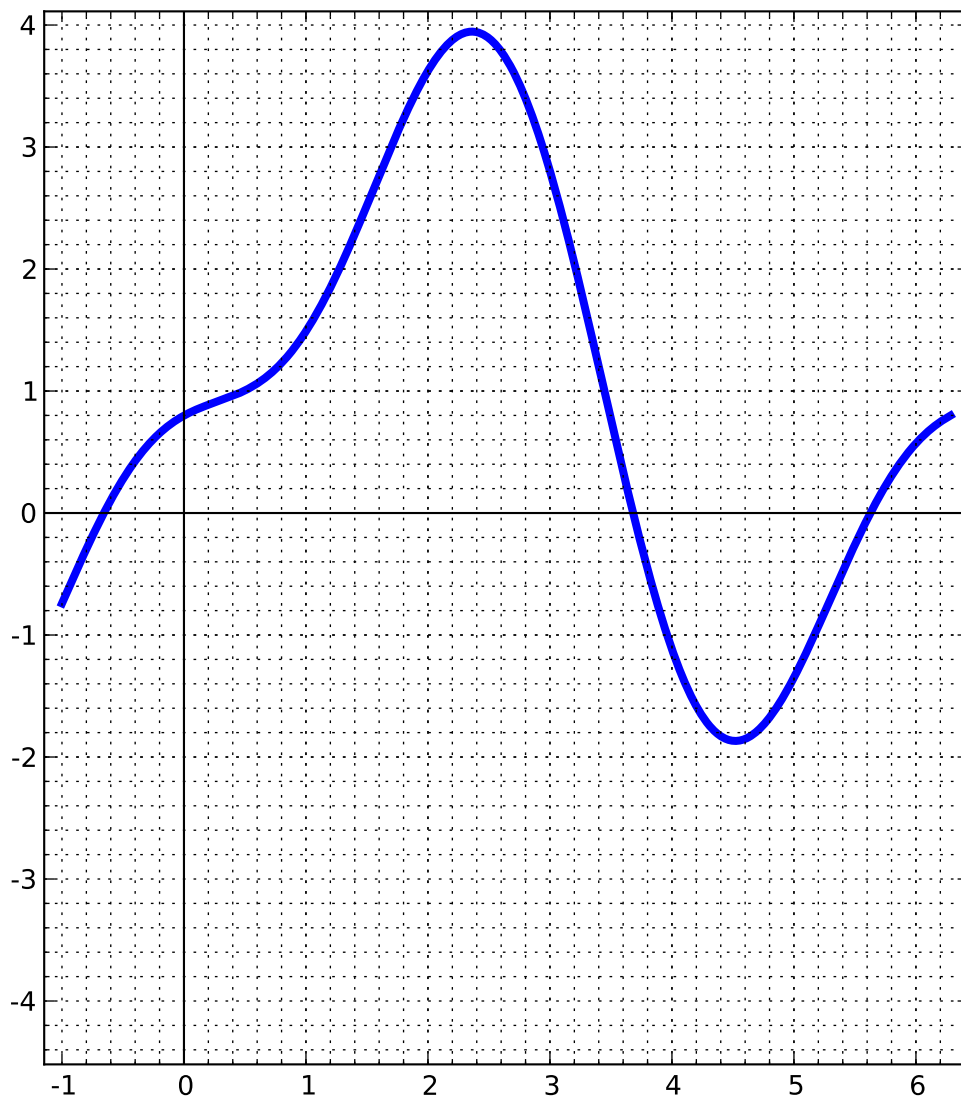
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Below is a plot of

$$f(x) = -\sin(x+2) + 2\cos(-x+2) + \cos(2x+1) - \cos(-x) + 2\cos(x) + 1.$$

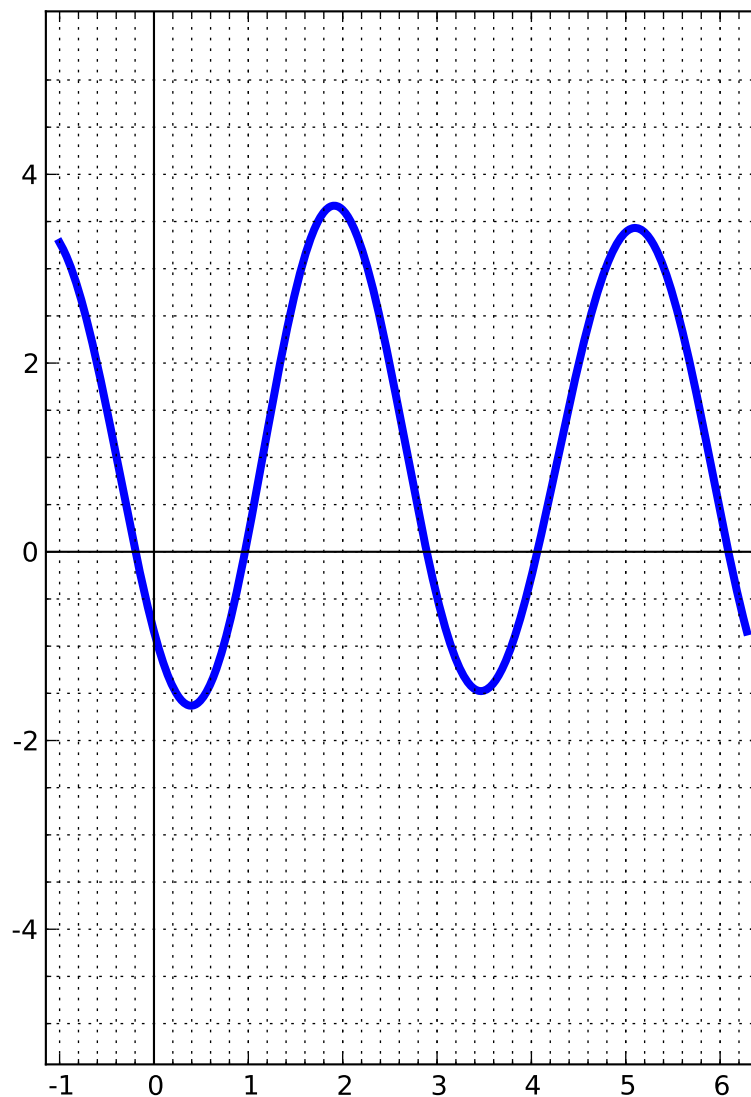
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Below is a plot of

$$f(x) = \sin(-3x + 2) - \sin(3x + 1) - 2\cos(-2x + 1) + \cos(-2x + 2) + \cos(2x + 2) + 1.$$

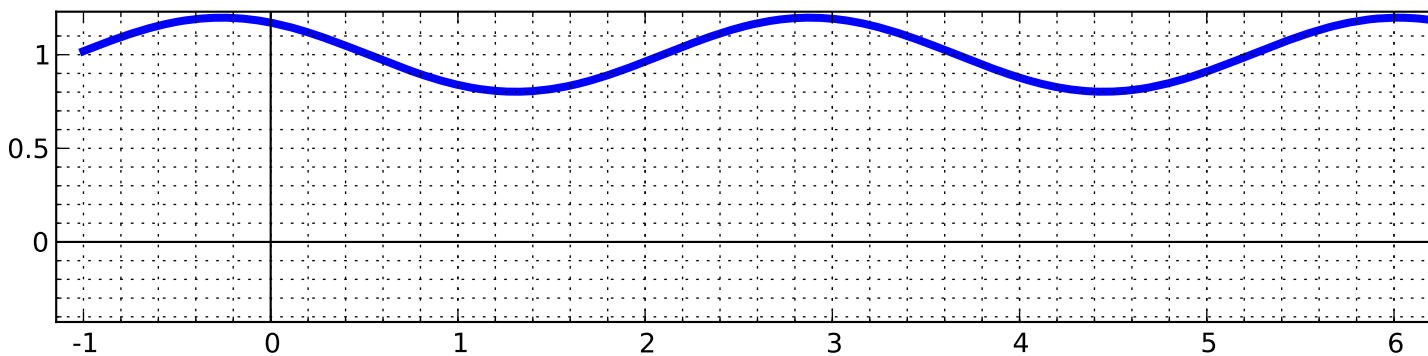
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Below is a plot of

$$f(x) = -\sin(-2x + 2) - 2\sin(-2x) + 2\cos(2x + 1) + 1.$$

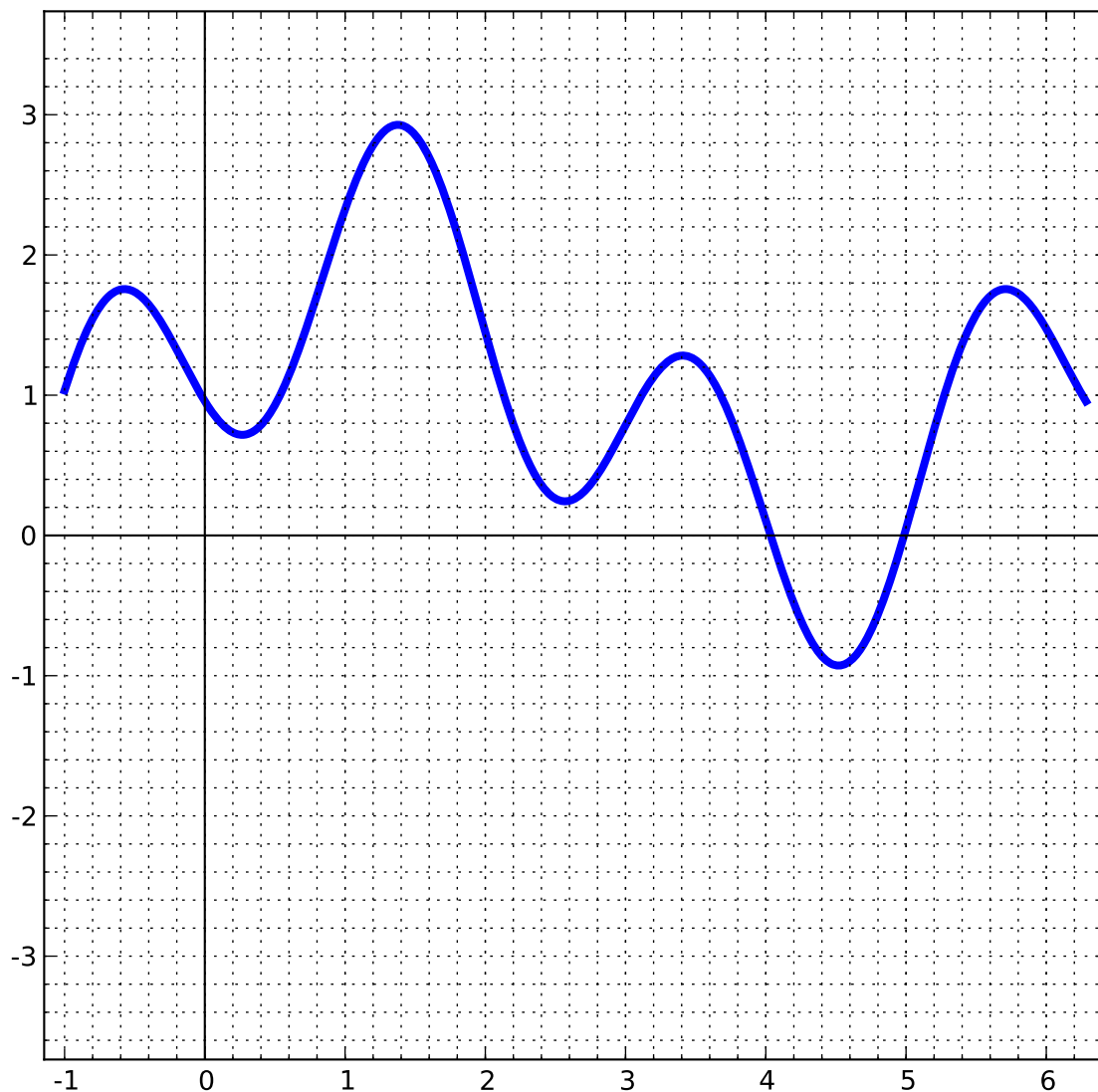
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Below is a plot of

$$f(x) = 2 \sin(-x) + 2 \sin(x) - \cos(x+2) + \cos(3x+1) - \cos(-3x) + 1.$$

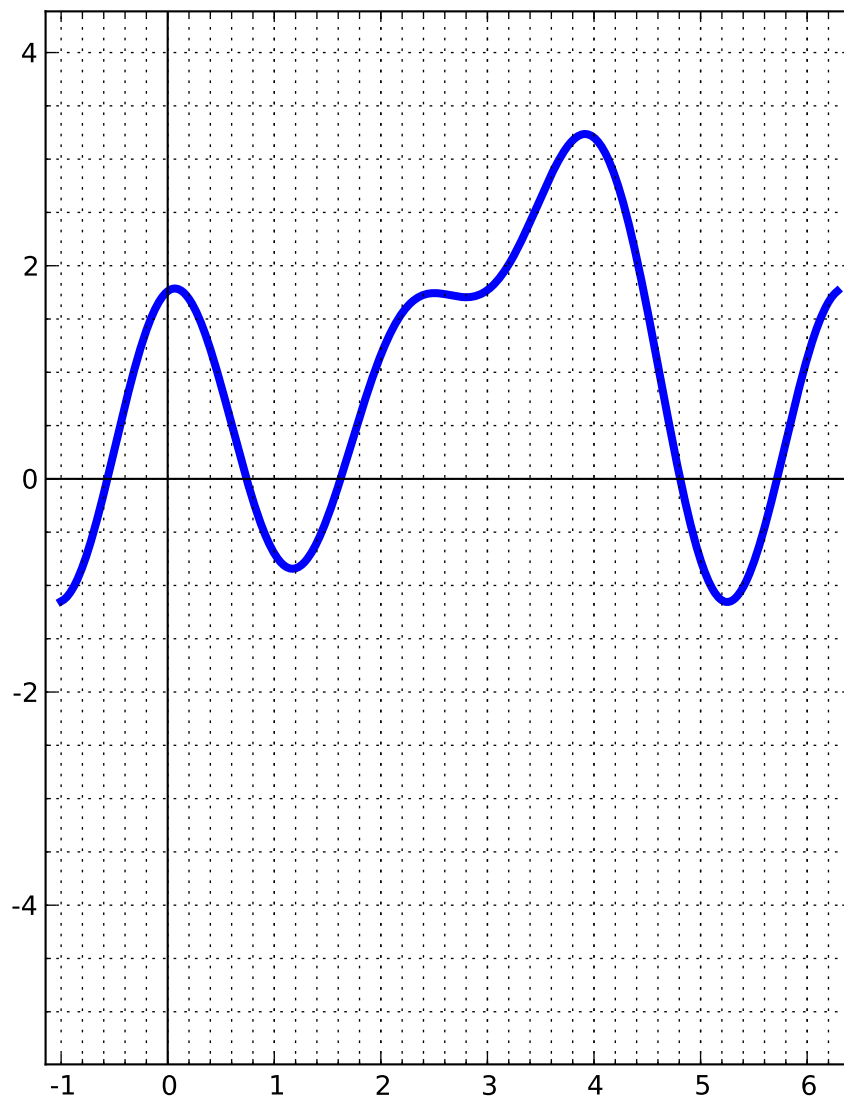
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Below is a plot of

$$f(x) = \sin(2x + 1) - 2\sin(x) - 2\cos(x + 1) + \cos(-3x) + 1.$$

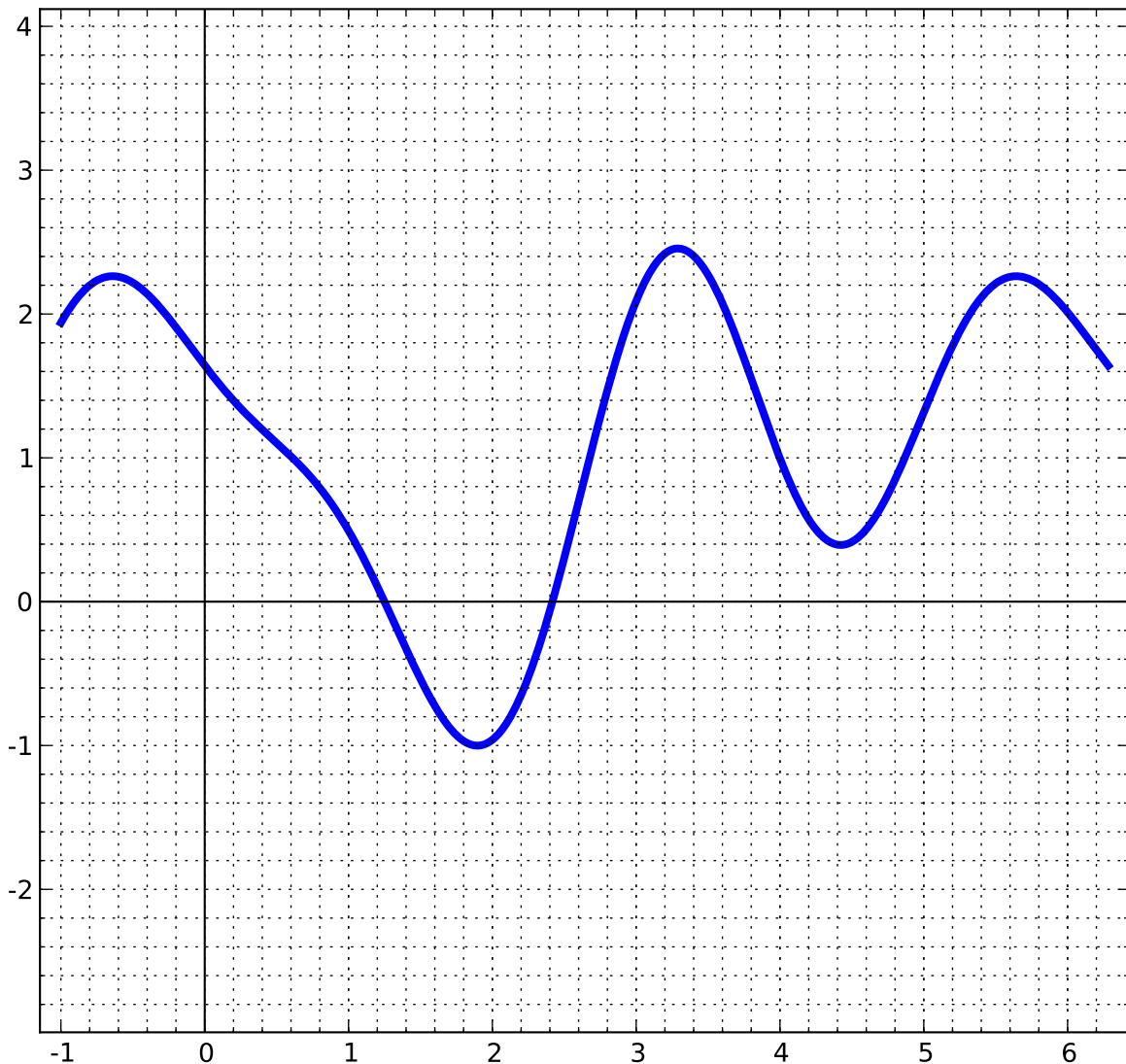
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Below is a plot of

$$f(x) = -2 \sin(-x + 2) - \sin(3x) - \cos(3x + 1) + \cos(-2x) + 2 \cos(x) + 1.$$

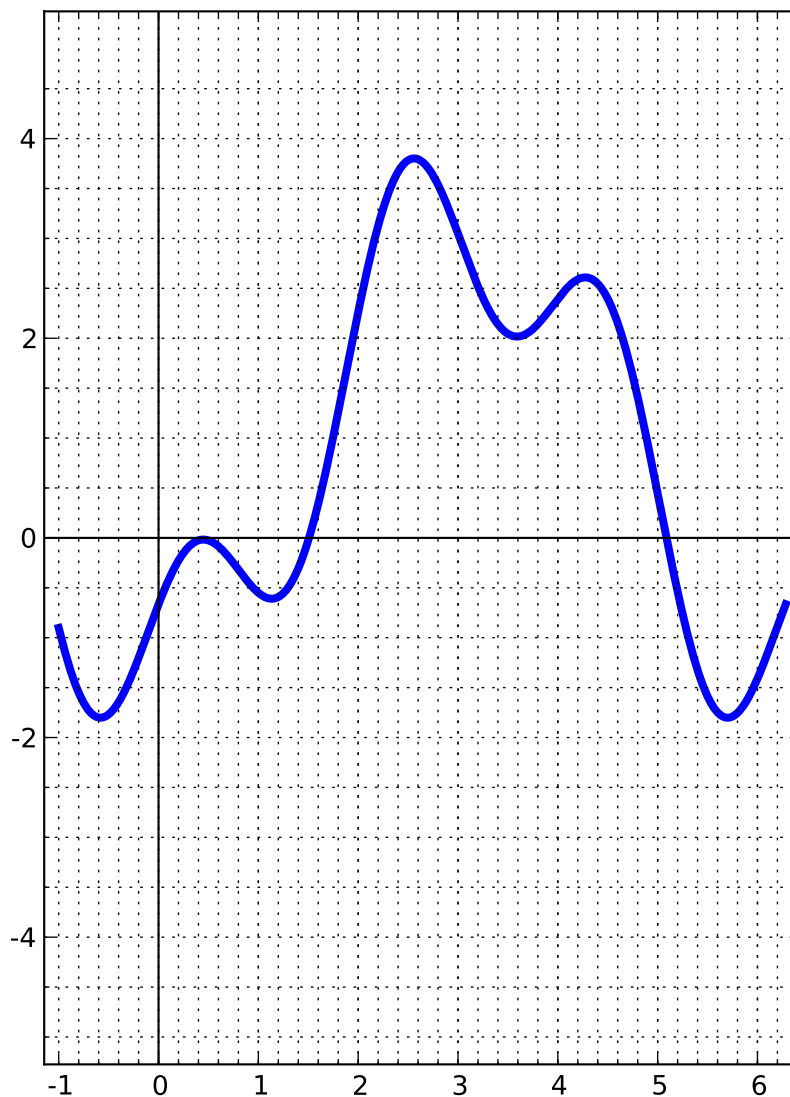
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Below is a plot of

$$f(x) = \cos(-3x + 1) - 2\cos(-x + 1) - \cos(x + 1) - \cos(x + 2) - \cos(x) + 1.$$

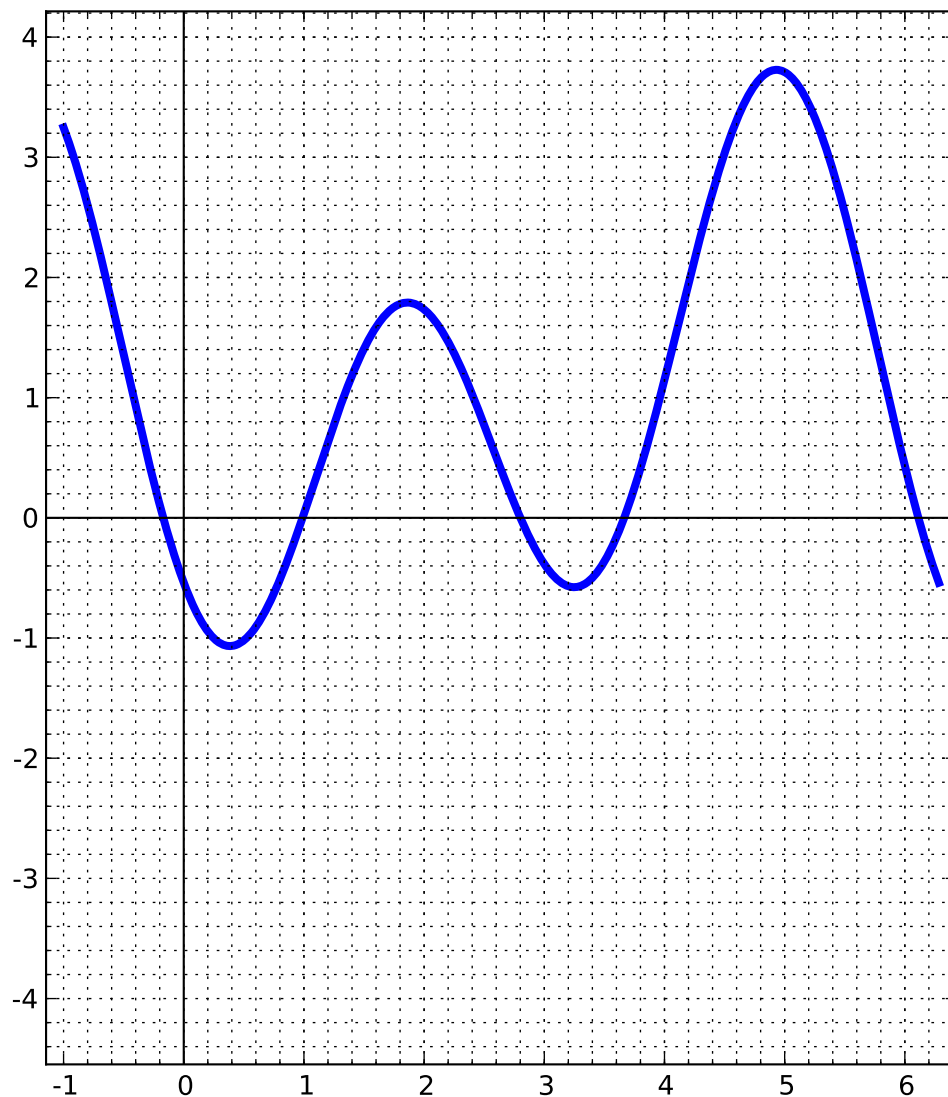
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Below is a plot of

$$f(x) = -\sin(x) - \cos(-2x + 1) - \cos(2x) + 1.$$

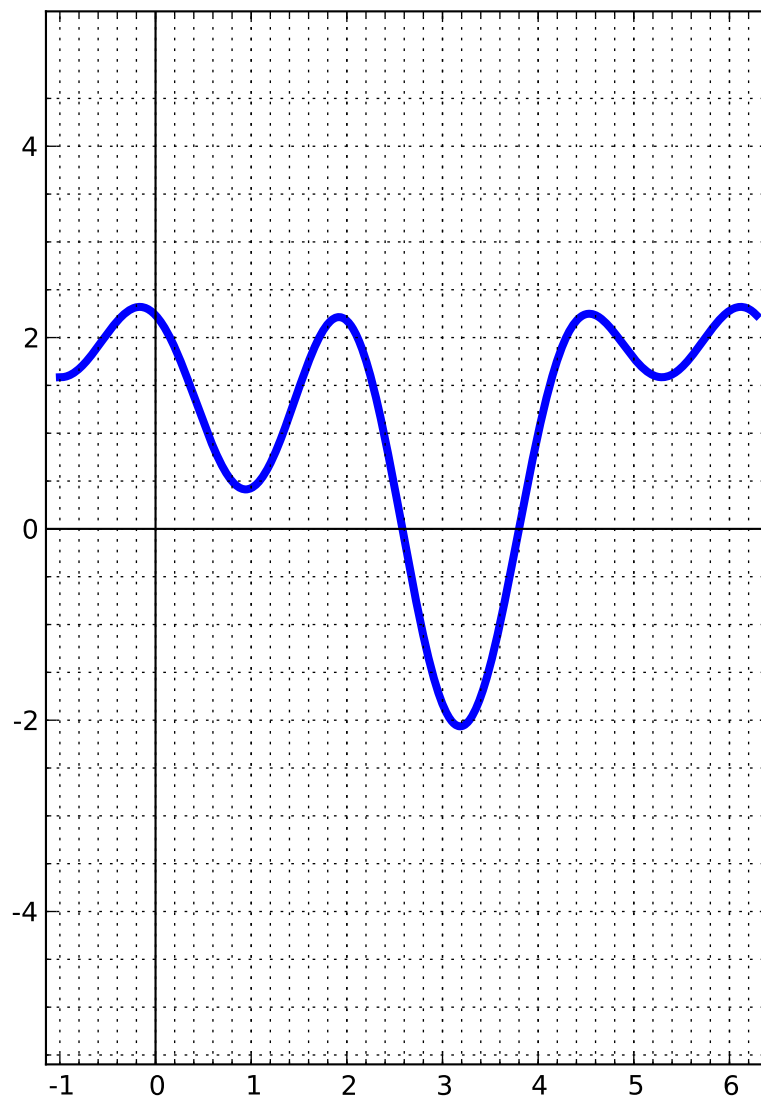
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Below is a plot of

$$f(x) = -\sin(-2x + 2) + 2\sin(-x + 1) - \cos(x + 1) + \cos(-3x) + 1.$$

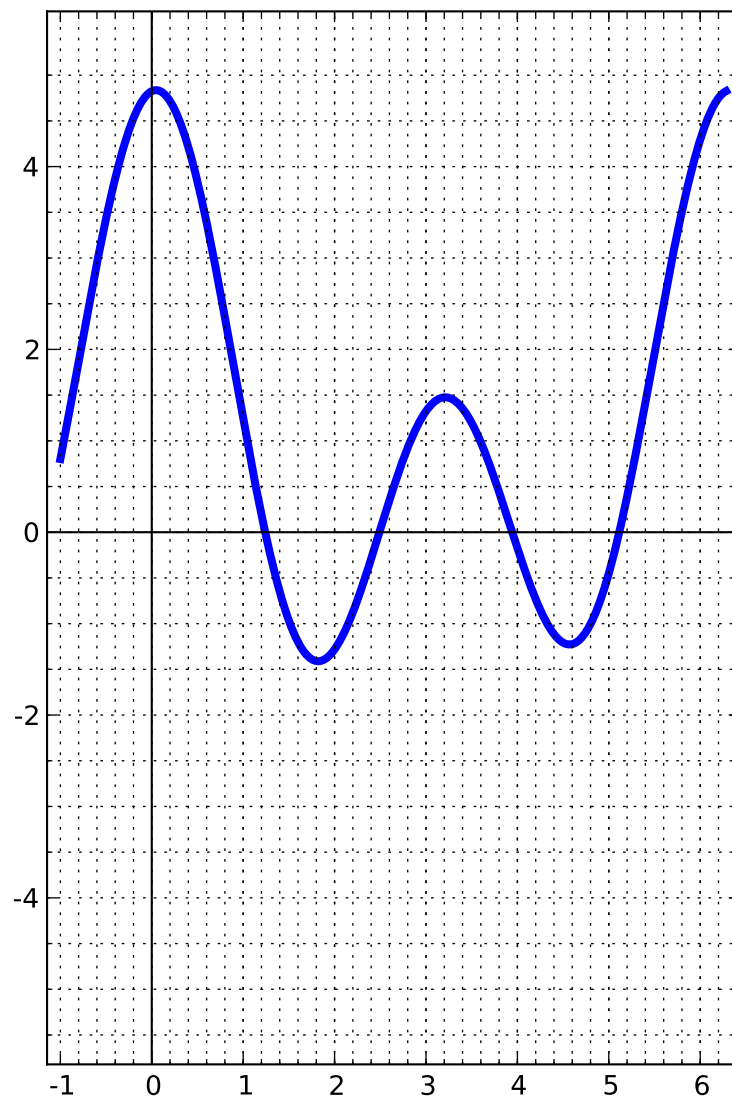
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Below is a plot of

$$f(x) = \sin(-x + 1) + \sin(x + 1) + 2 \sin(2x + 1) - \cos(-2x + 1) + \cos(2x) + 1.$$

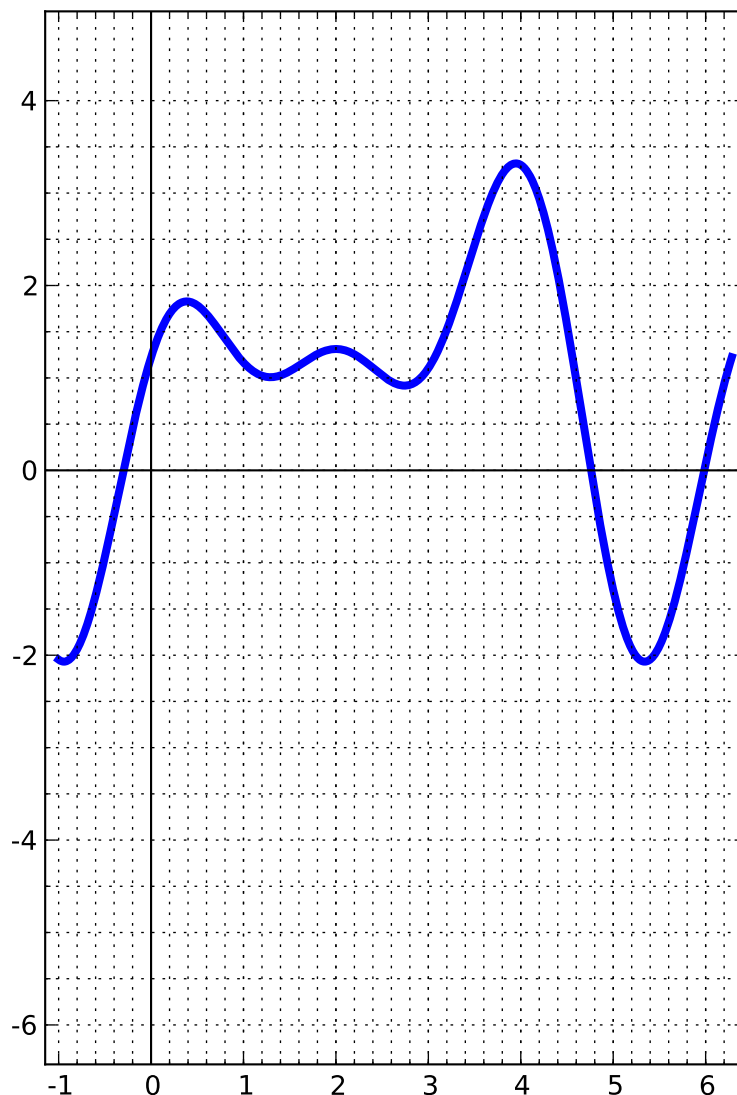
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Below is a plot of

$$f(x) = -\sin(x+2) + \sin(2x+1) - \cos(-3x+2) - \cos(2x+1) - \cos(3x+2) + 1.$$

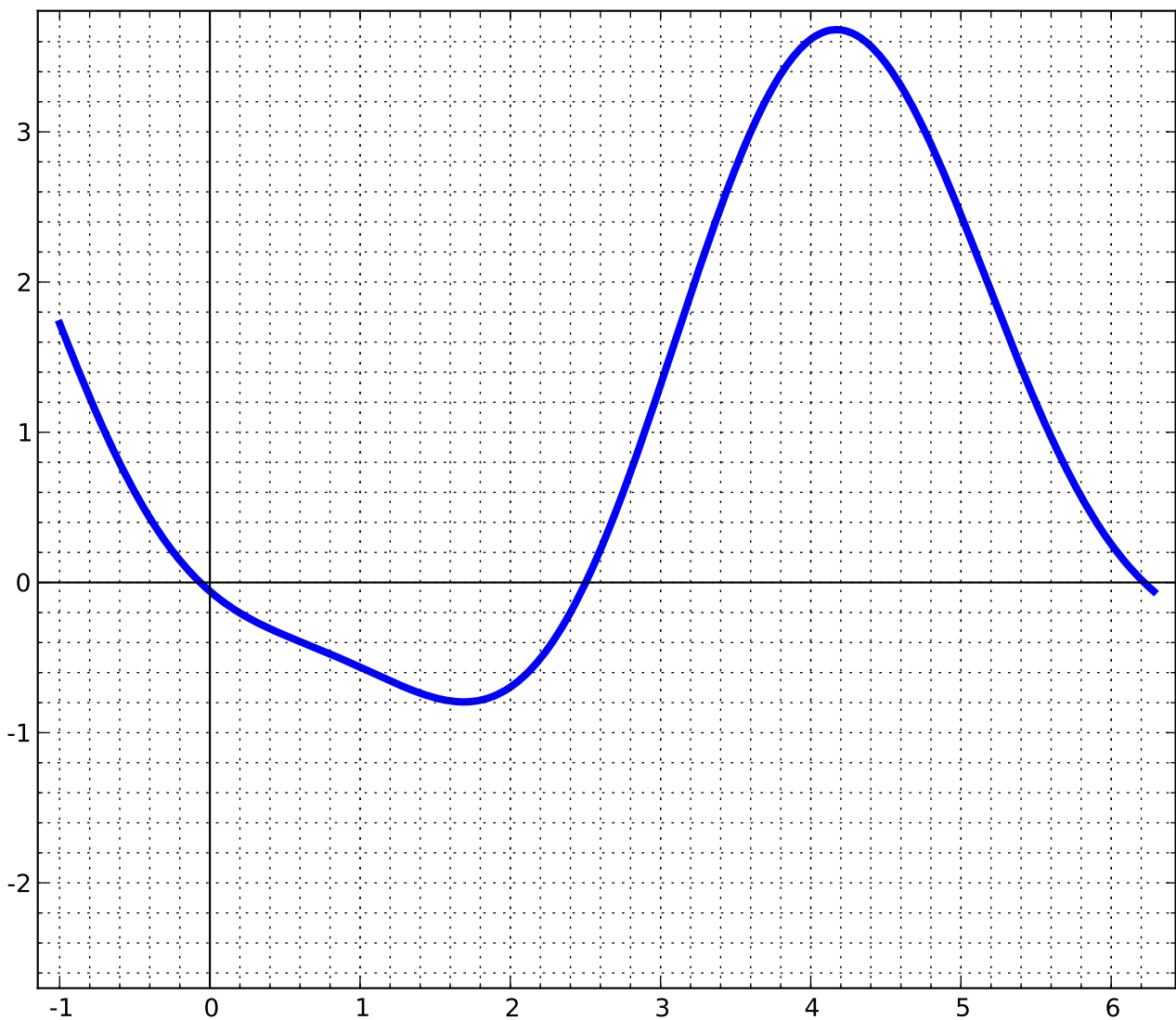
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Below is a plot of

$$f(x) = \sin(-x + 1) - \sin(x + 2) + \sin(2x + 1) + 2 \cos(x + 2) - \cos(-2x) + 1.$$

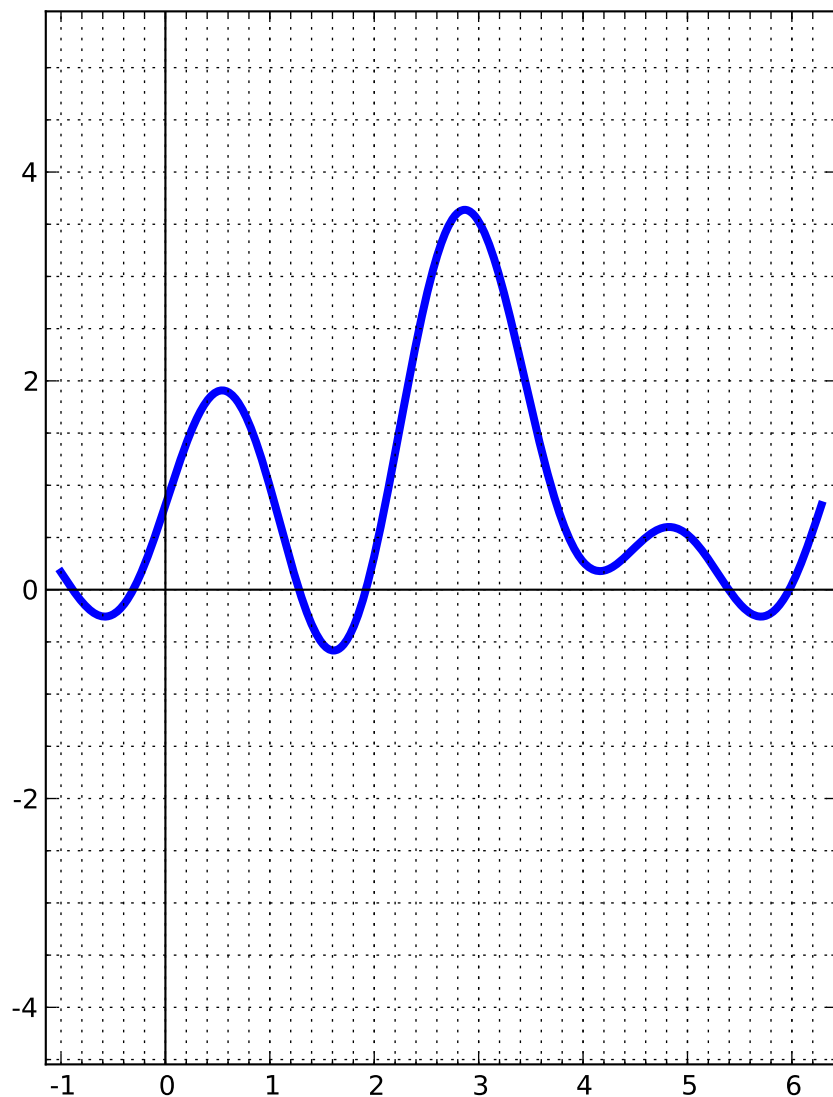
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Below is a plot of

$$f(x) = \sin(-x + 2) - 2 \sin(x + 1) + \sin(x) + \cos(-3x + 2) + \cos(-2x) + 1.$$

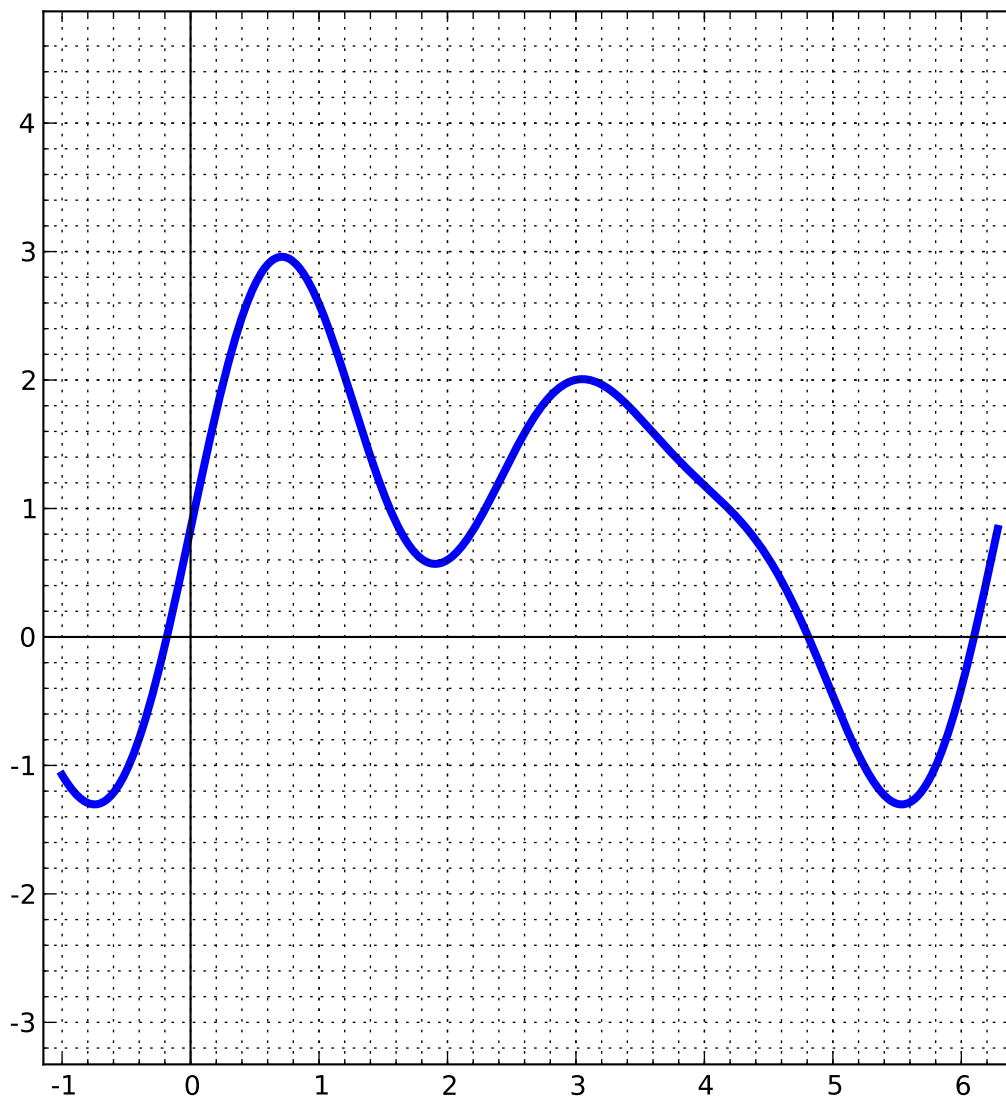
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Below is a plot of

$$f(x) = \sin(3x + 1) + 2 \sin(2x) - \cos(-2x + 2) + \cos(-x + 2) - \cos(3x) + 1.$$

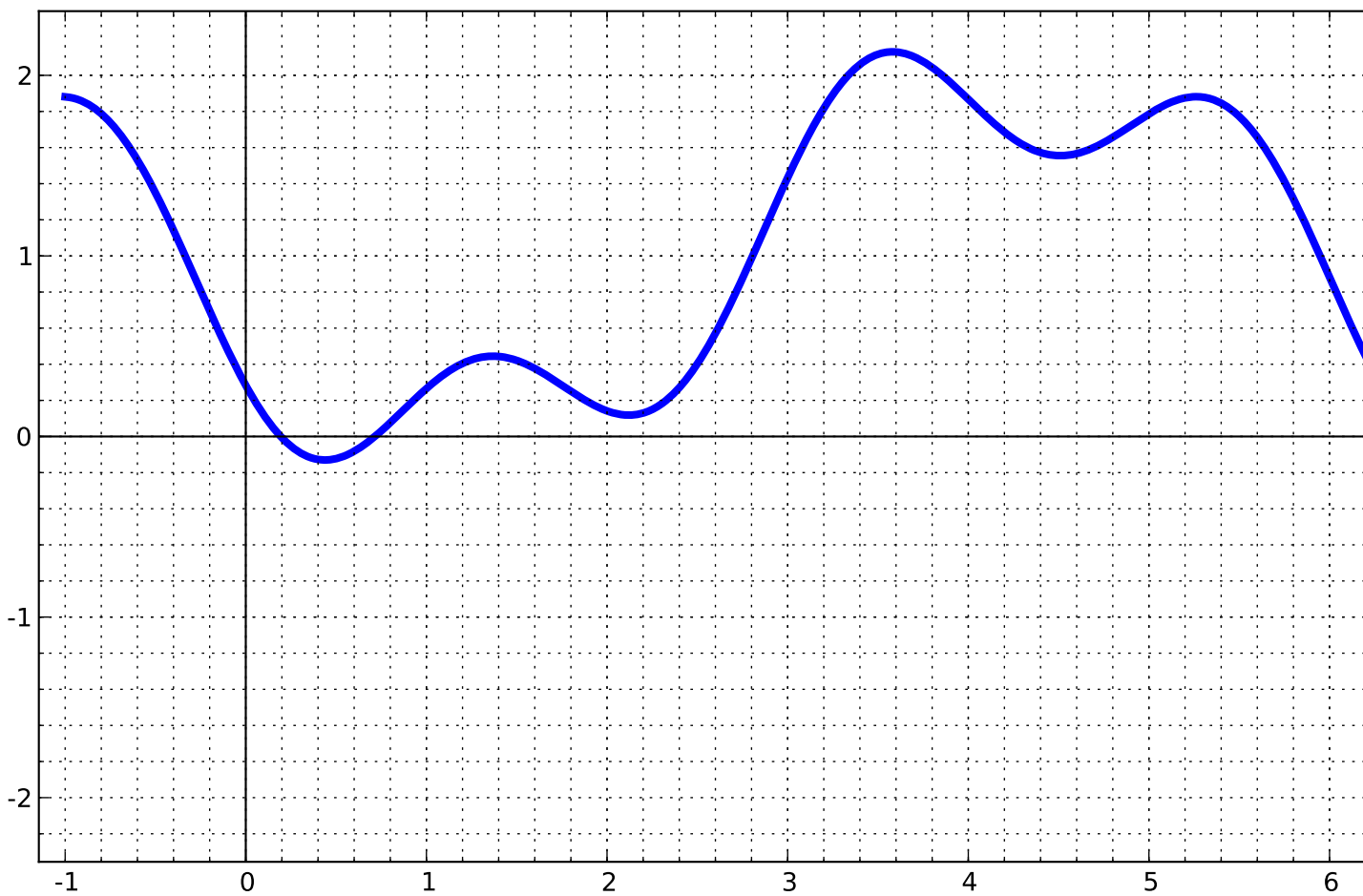
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Below is a plot of

$$f(x) = -\sin(-3x+1) + \cos(x+2) + \cos(3x+1) + 2\cos(-x) - 2\cos(x) + 1.$$

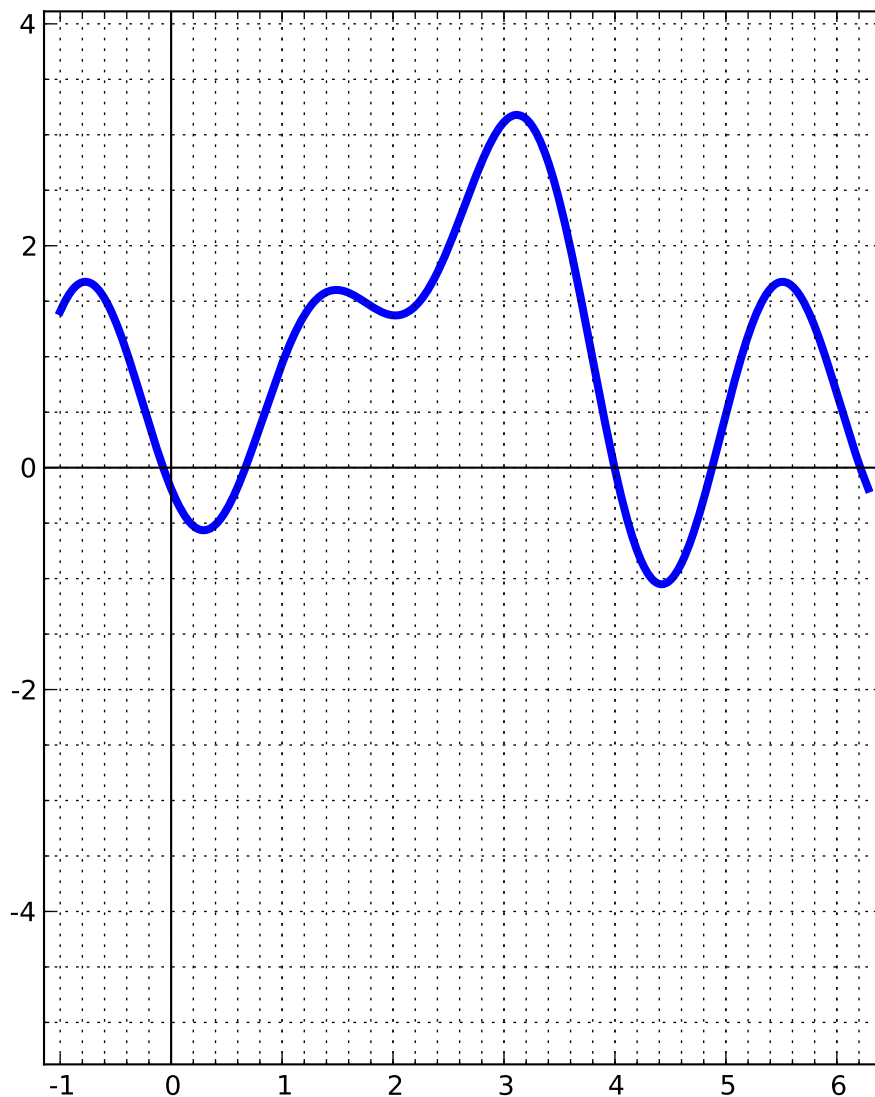
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$$f(x) = \sin(-2x + 2) - \sin(-x + 1) - \sin(3x + 1) - 2\sin(2x) + \cos(-2x + 2) + 1.$$

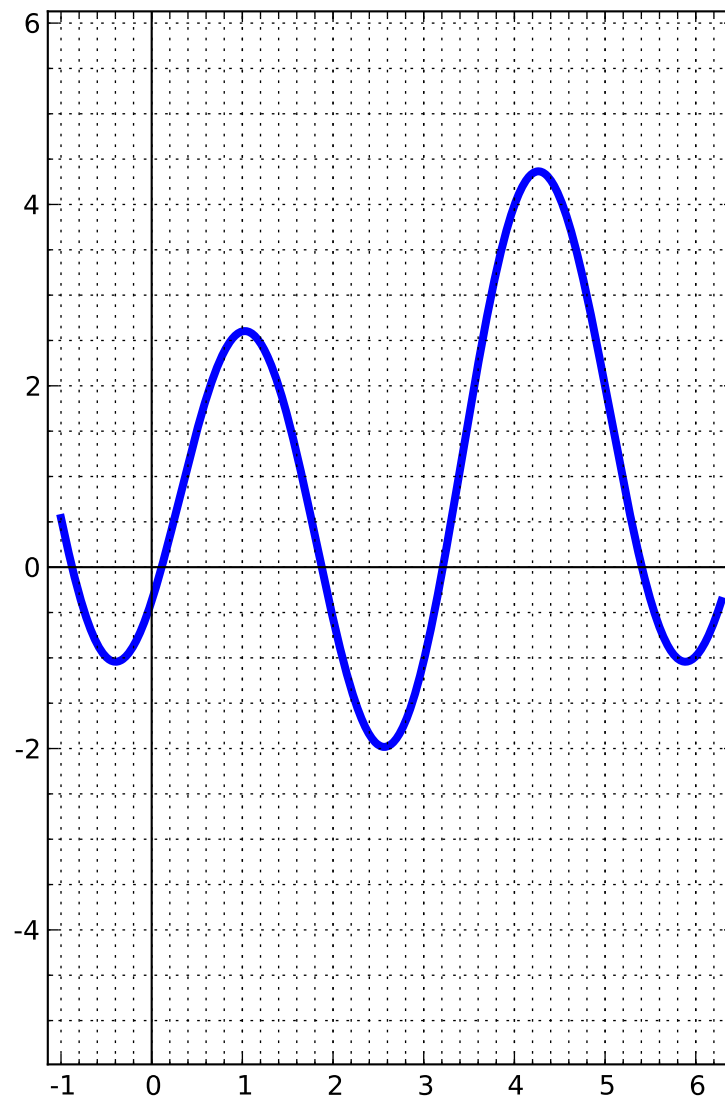
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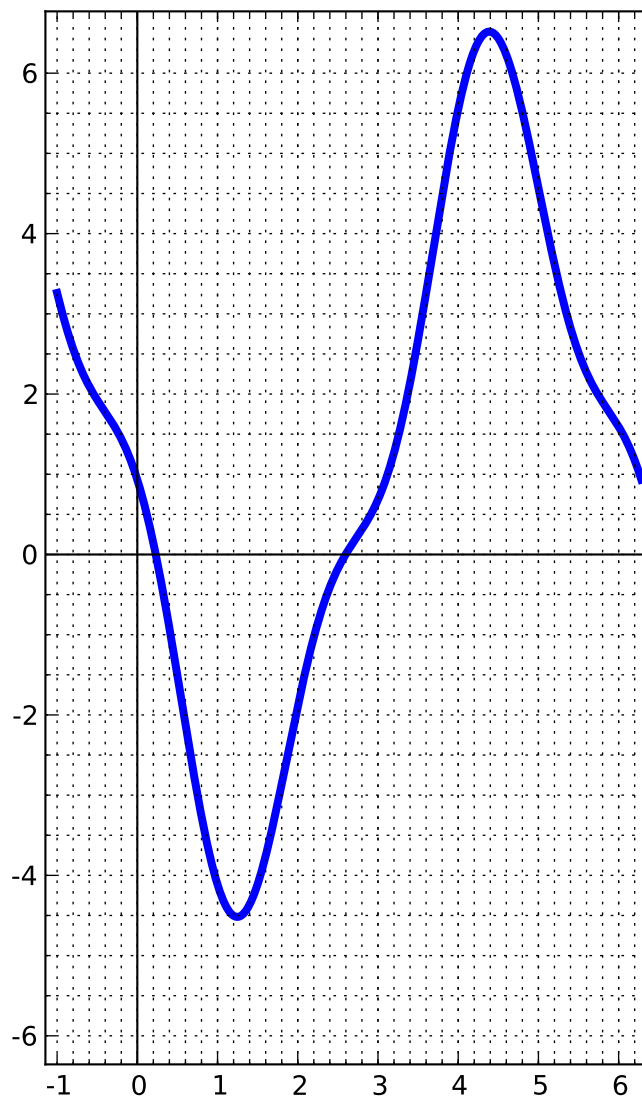
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$$f(x) = \sin(-3x + 2) + 2 \sin(-x + 1) - 2 \sin(-x + 2) - \sin(x + 1) + 2 \sin(-x) + 1.$$

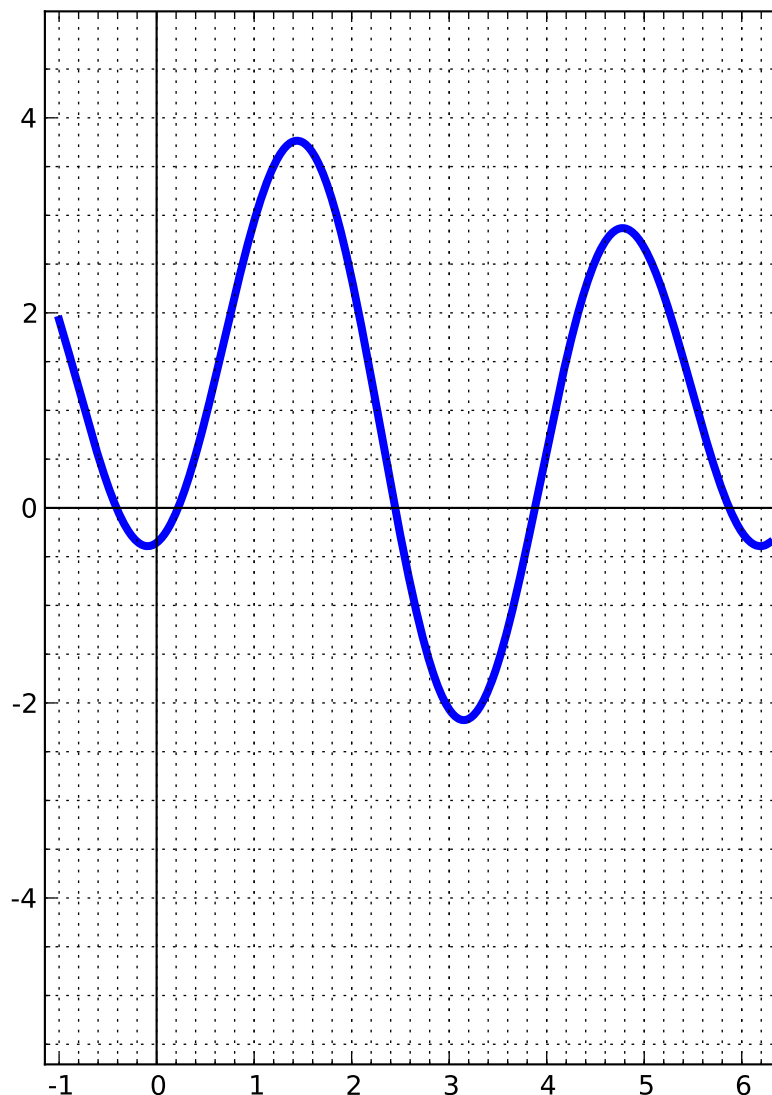
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Below is a plot of

$$f(x) = -2 \sin(-2x + 1) + \sin(-x + 2) - \cos(-2x + 2) - 2 \cos(-2x) + \cos(2x) + 1.$$

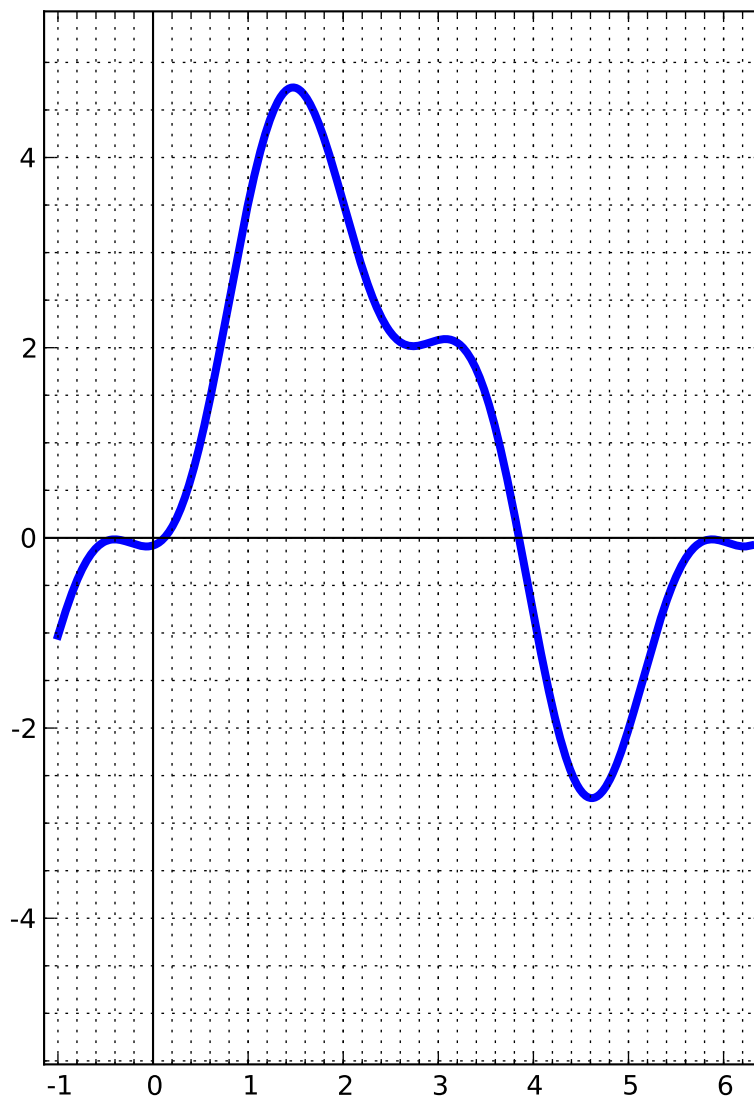
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$$f(x) = -2 \sin(-x) - \cos(-3x + 1) - \cos(x + 1) + 1.$$

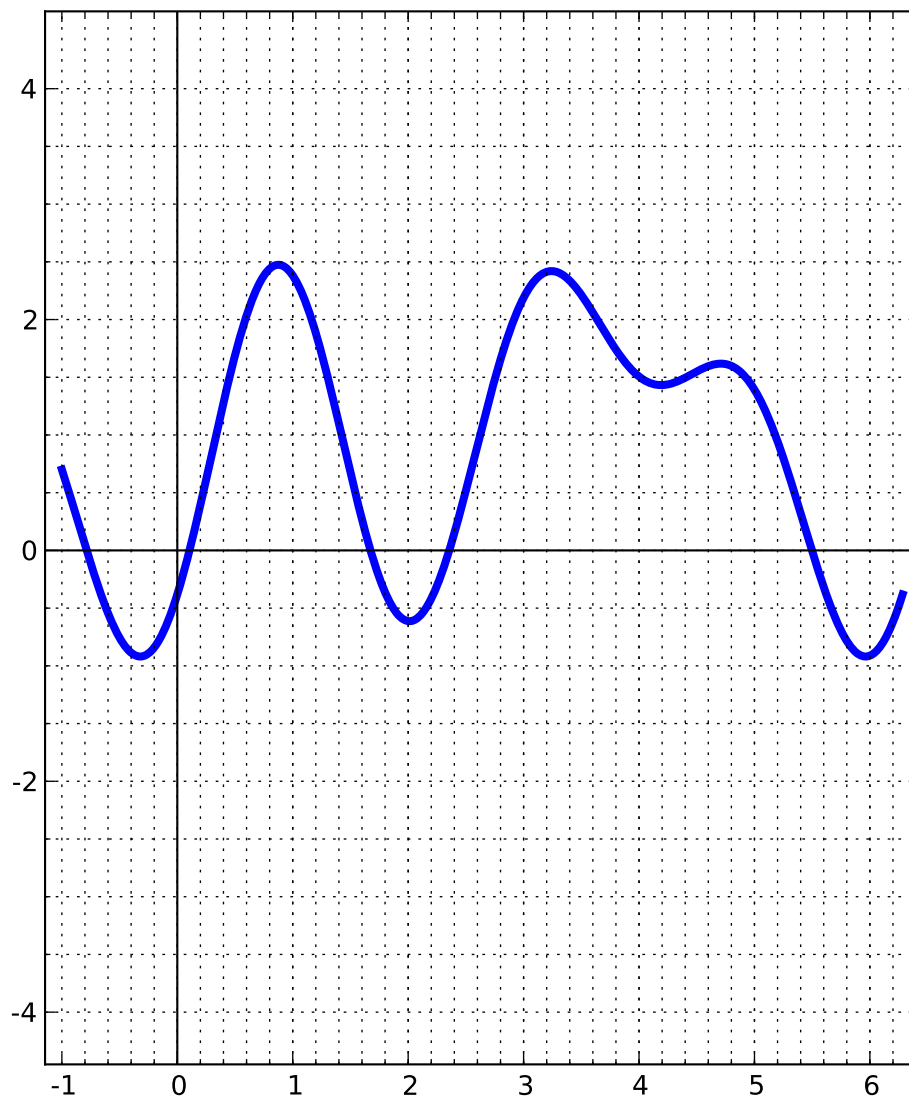
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Below is a plot of

$$f(x) = -\sin(3x + 1) + \sin(-x) + \sin(2x) + \sin(3x) - \cos(x + 1) + 1.$$

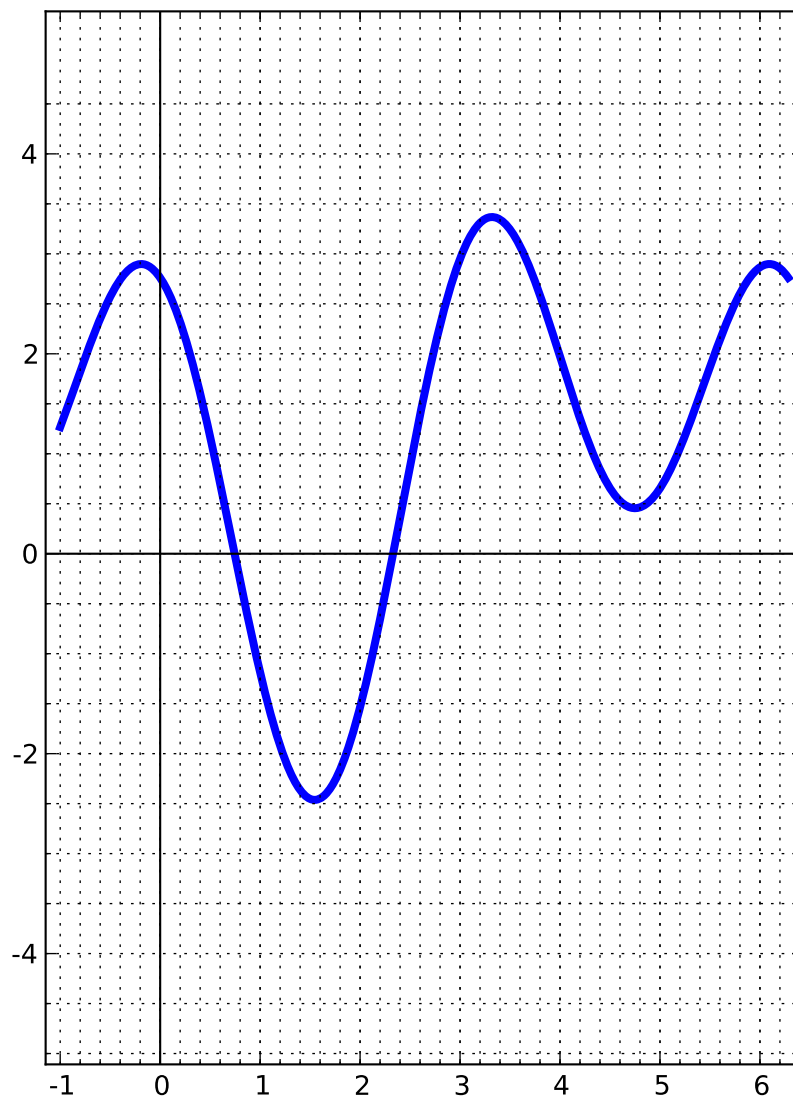
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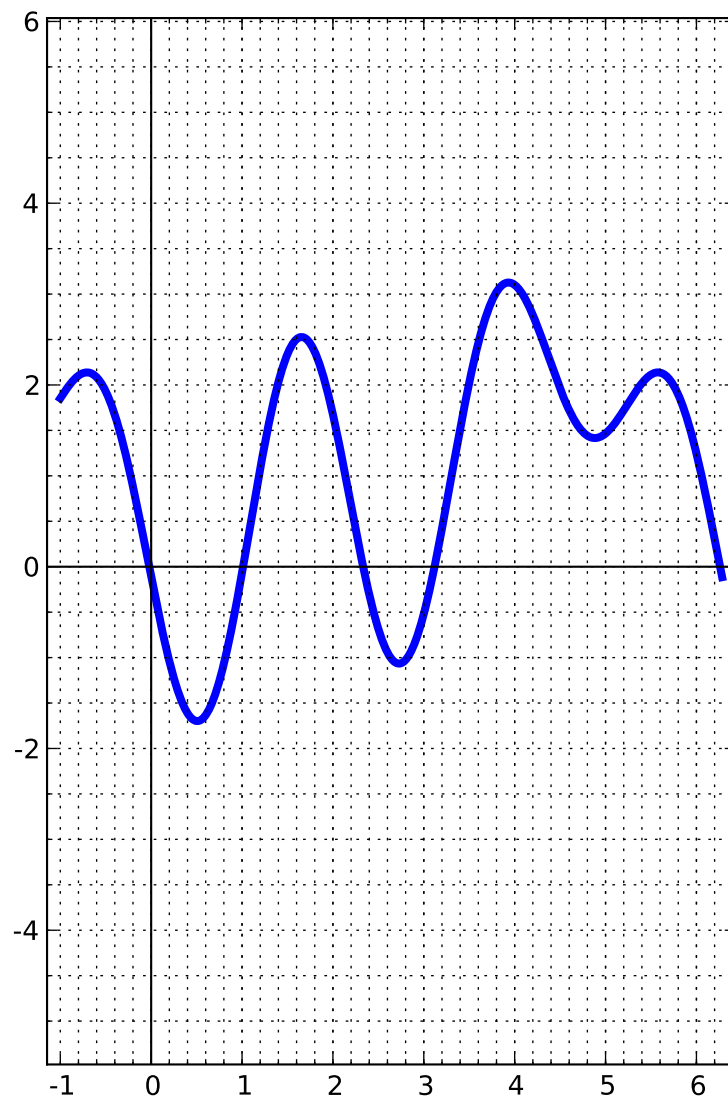
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Below is a plot of

$$f(x) = \sin(-3x + 1) - \cos(-3x + 1) + \cos(x + 2) + \cos(-2x) - 2\cos(2x) + 1.$$

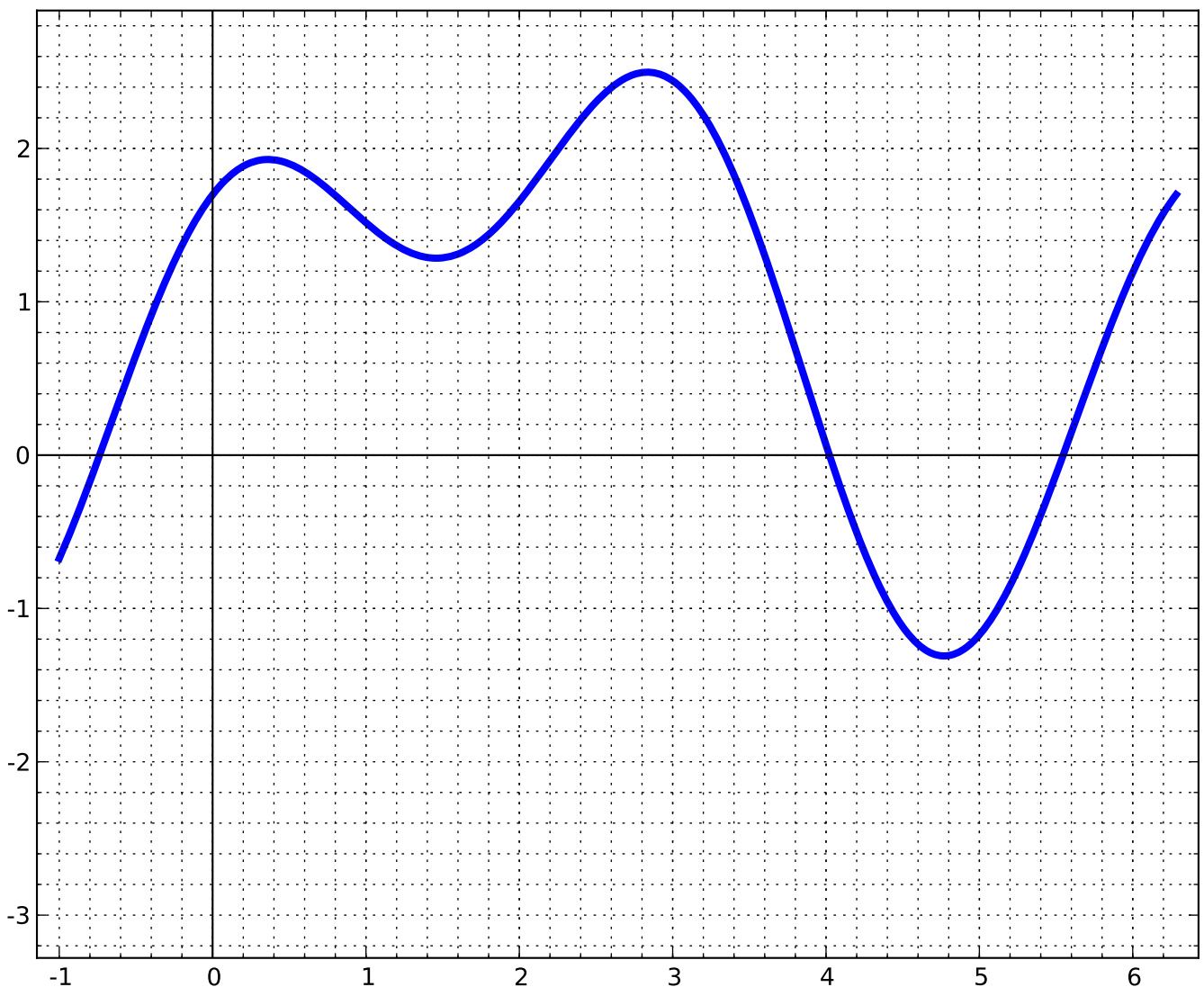
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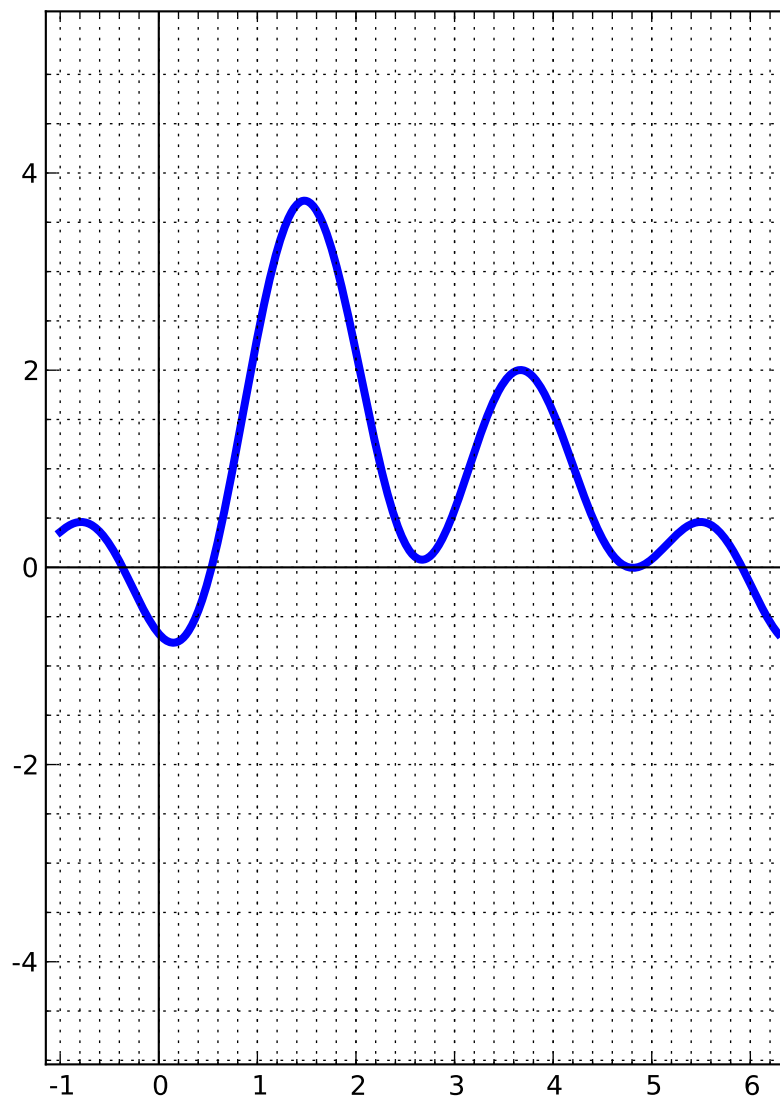
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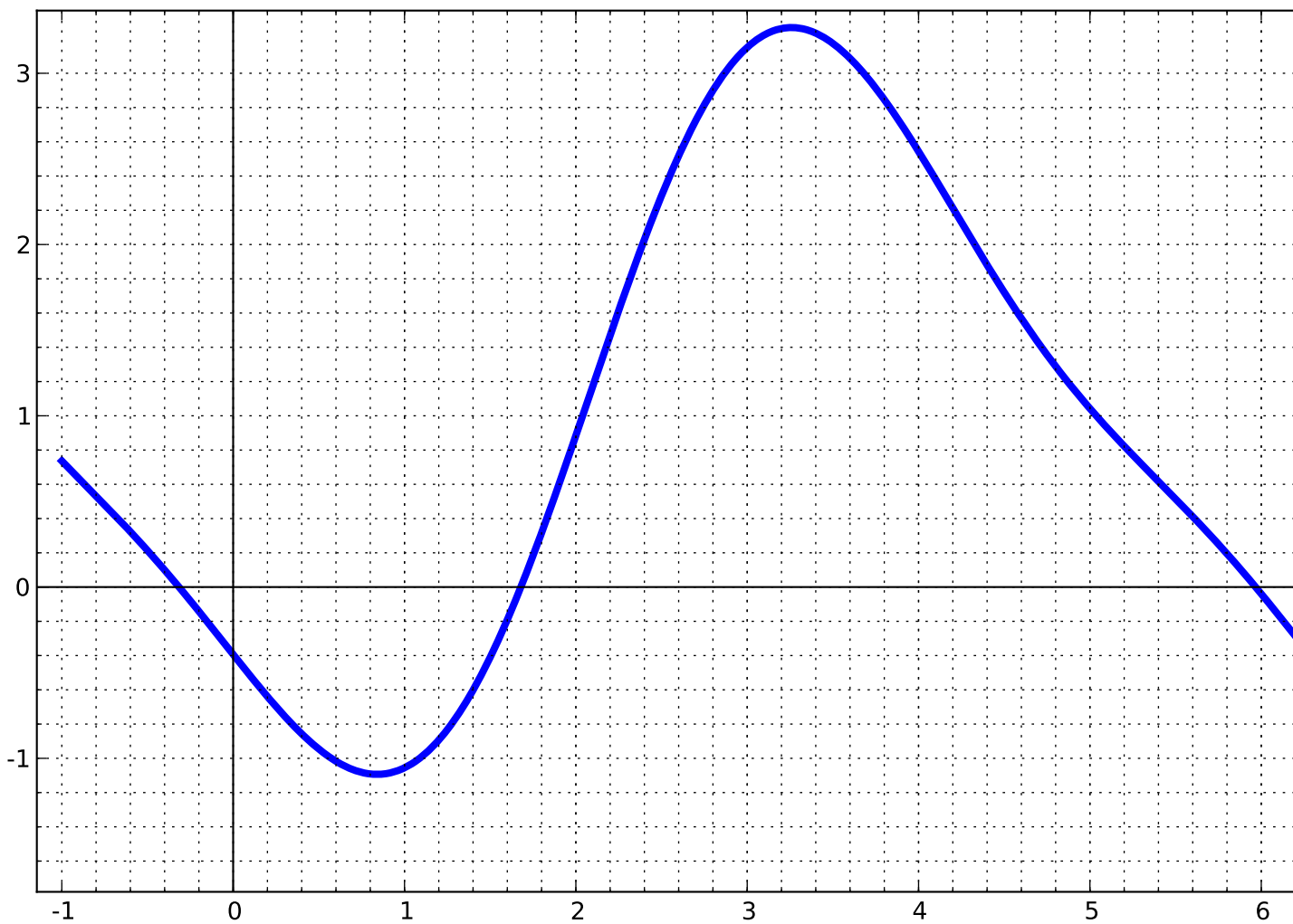
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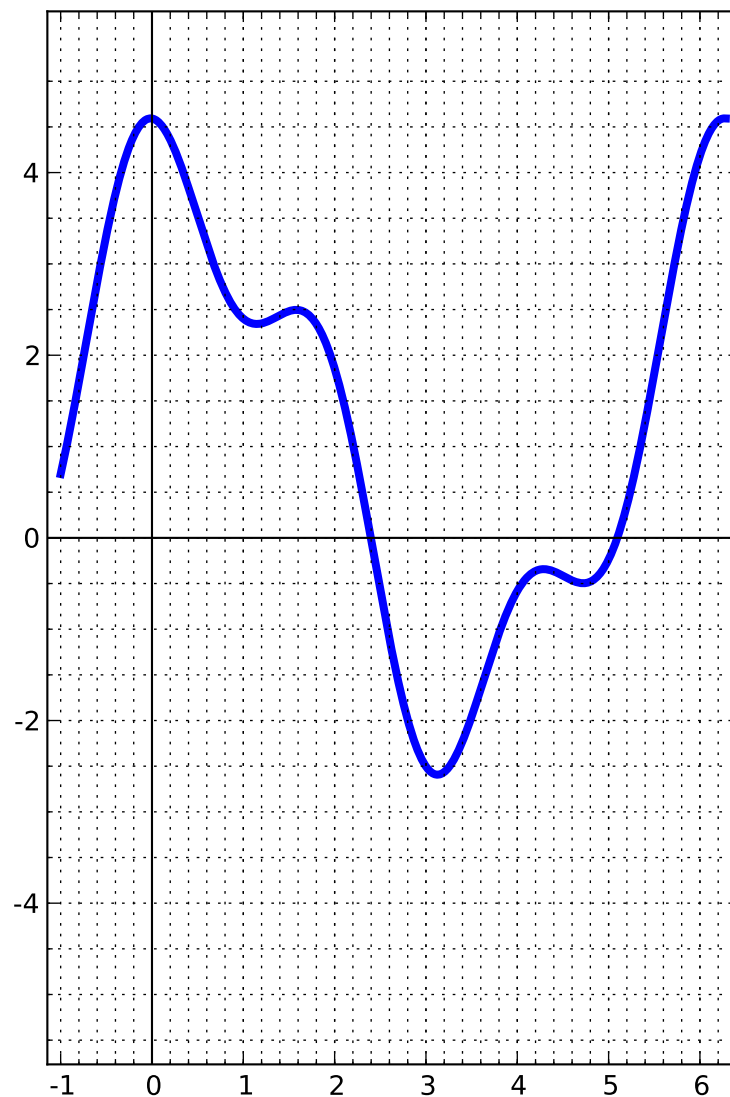
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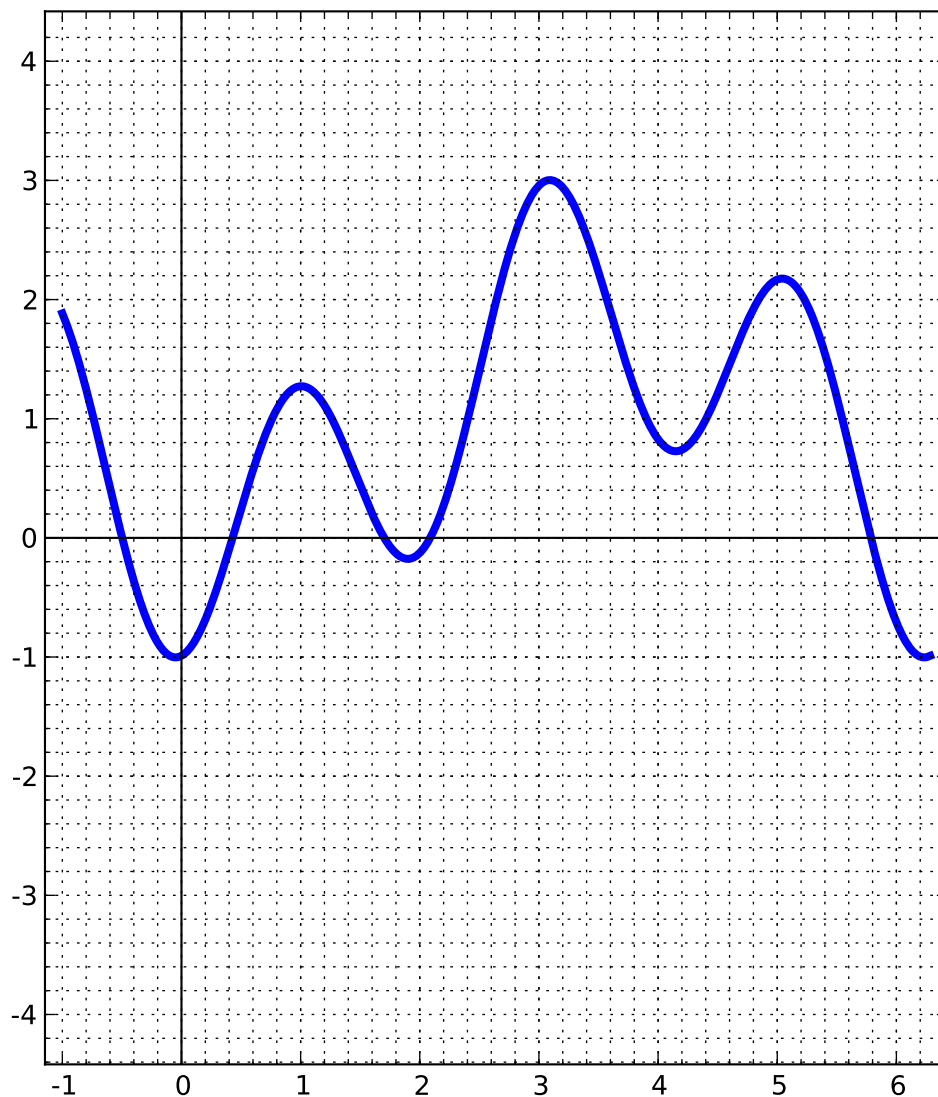
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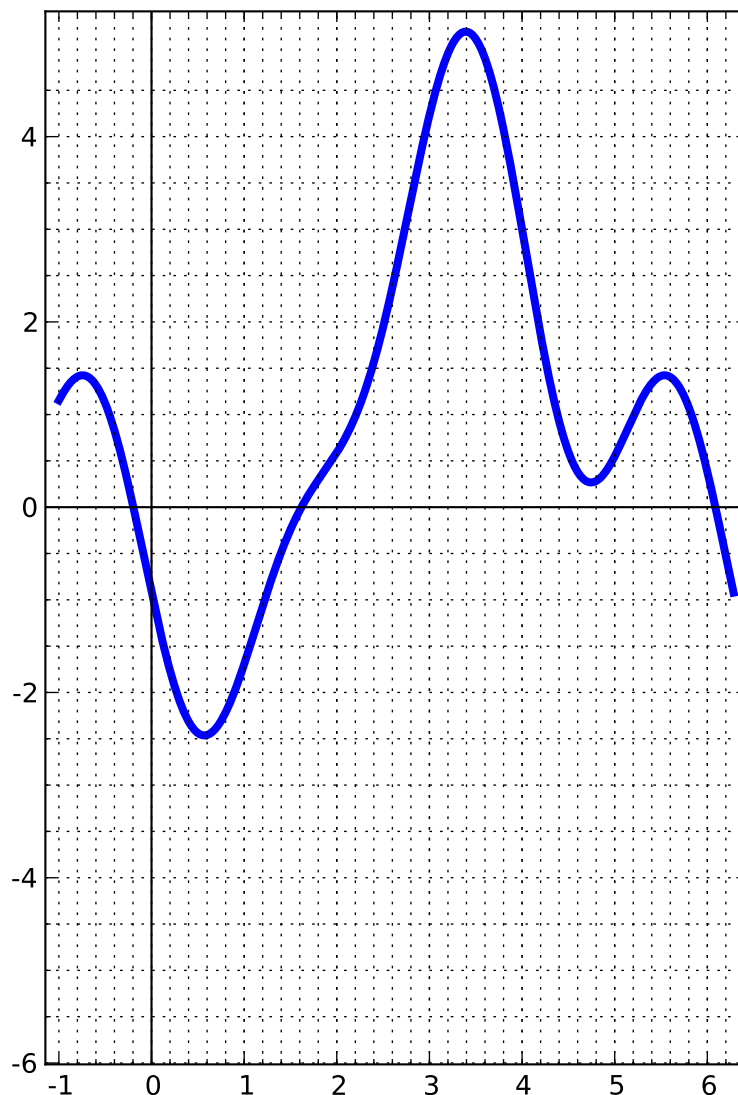
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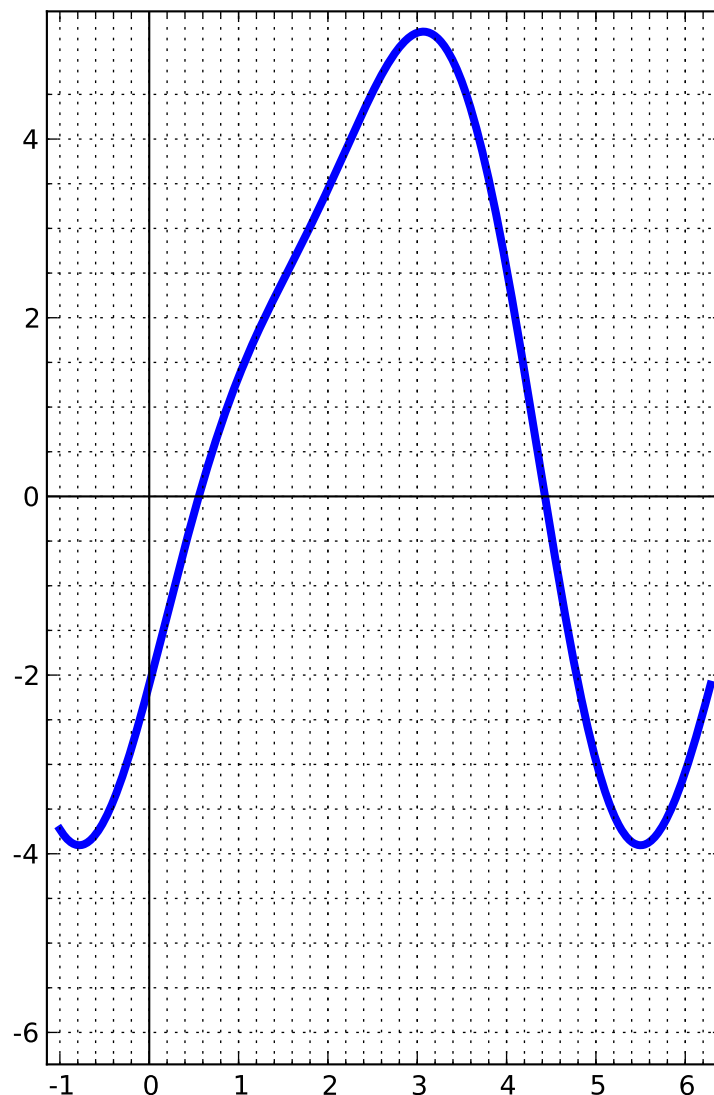
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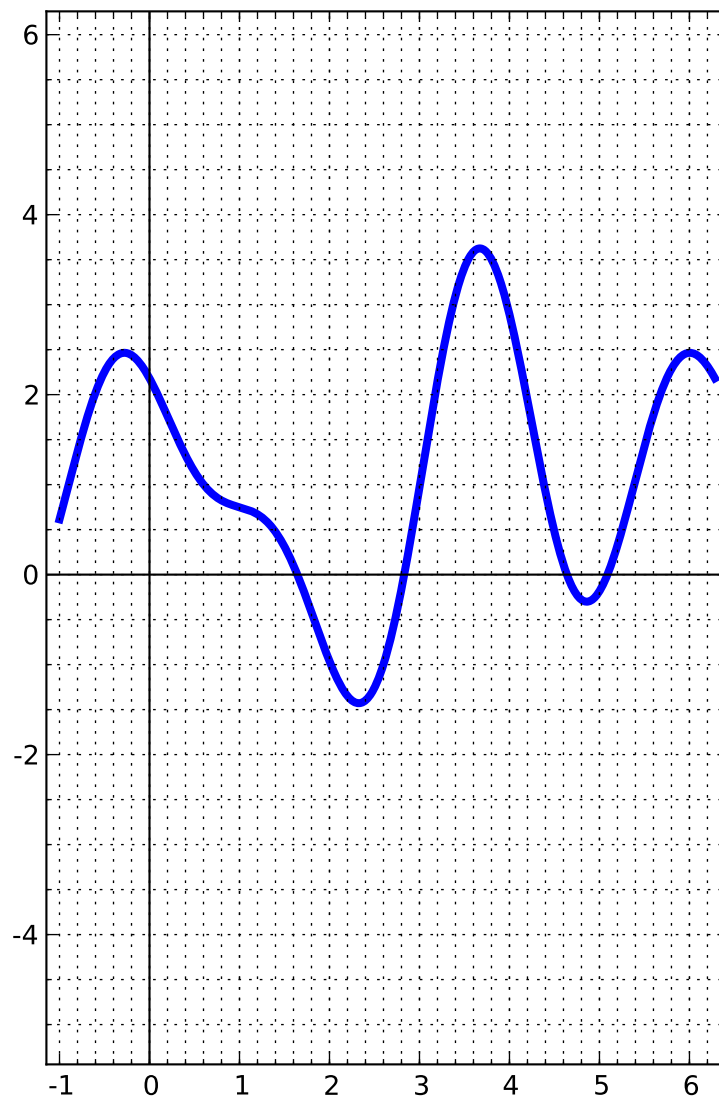
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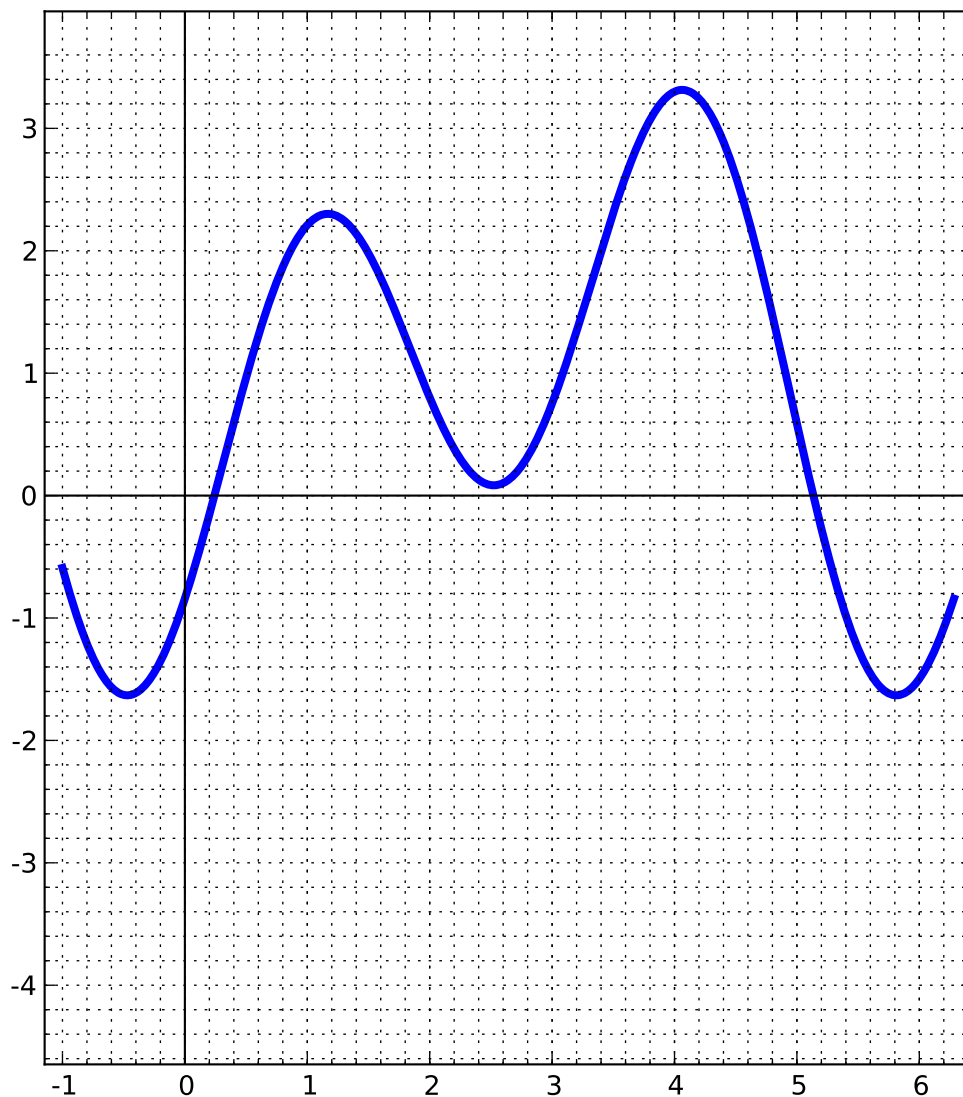
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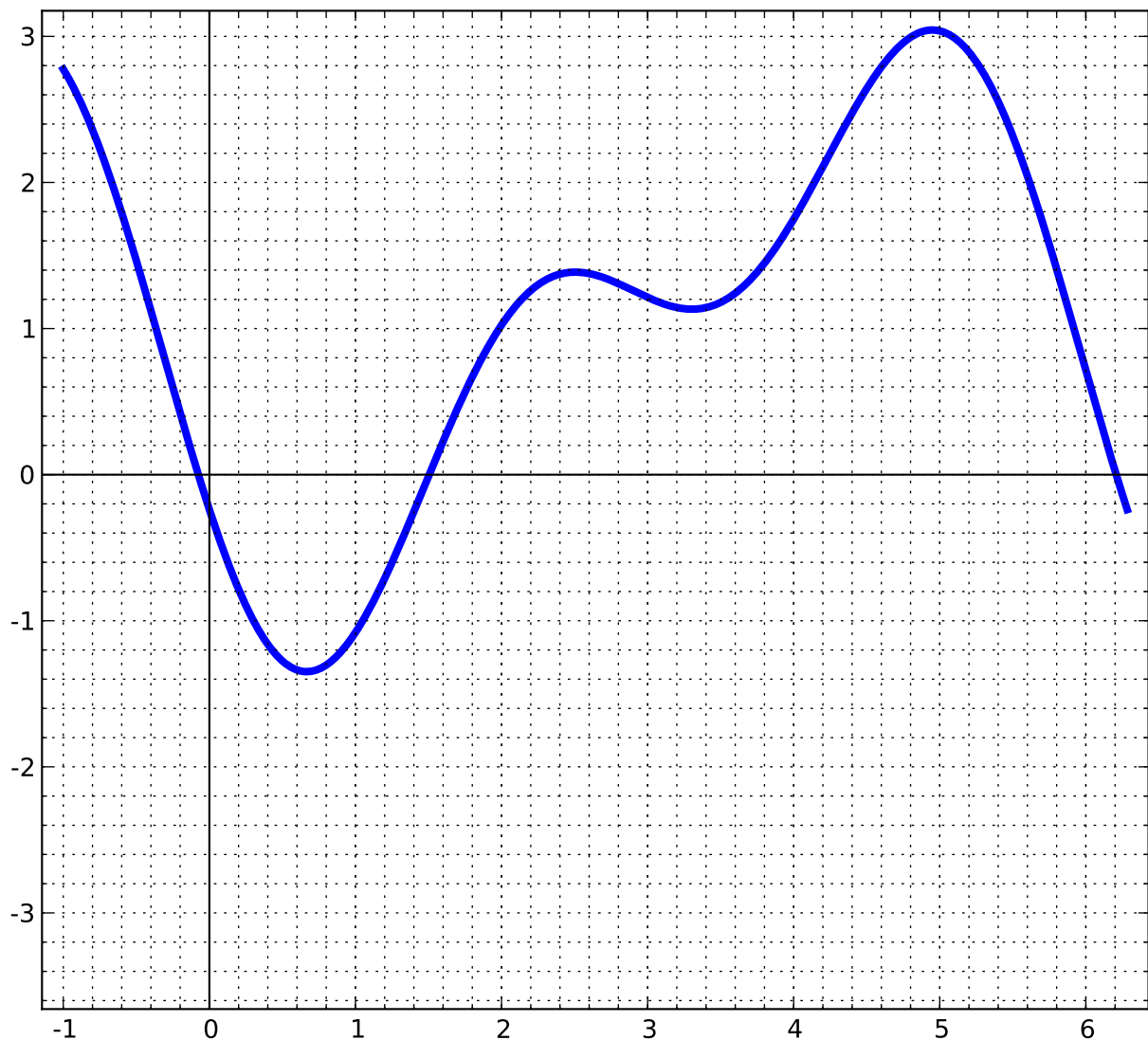
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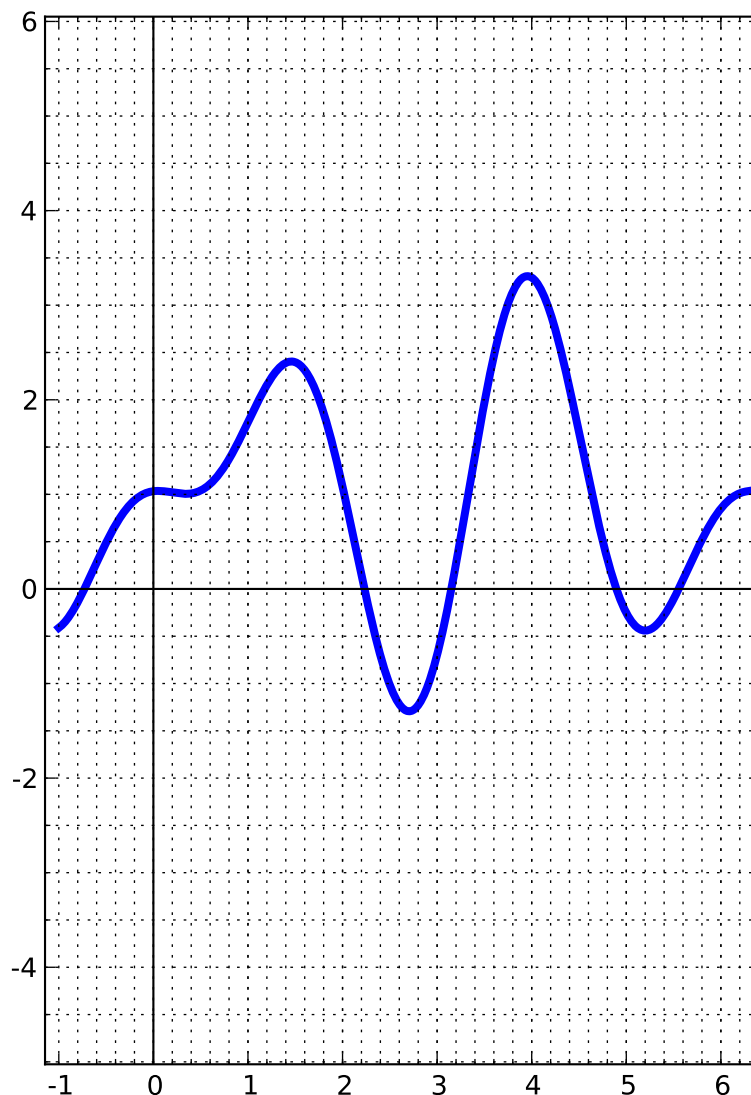
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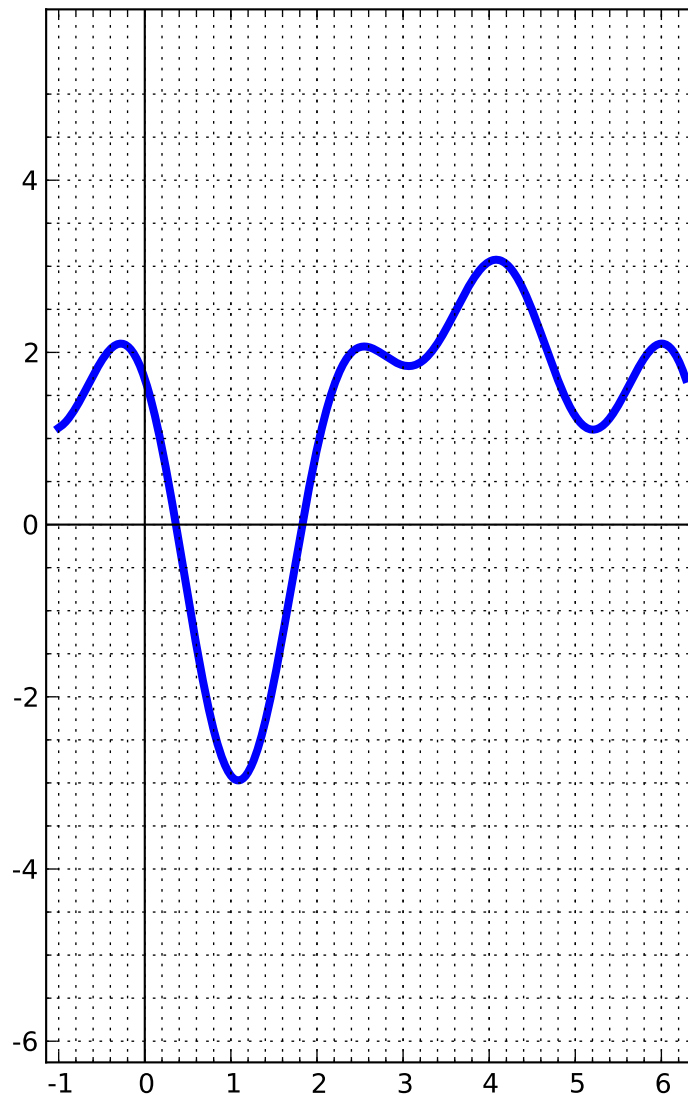
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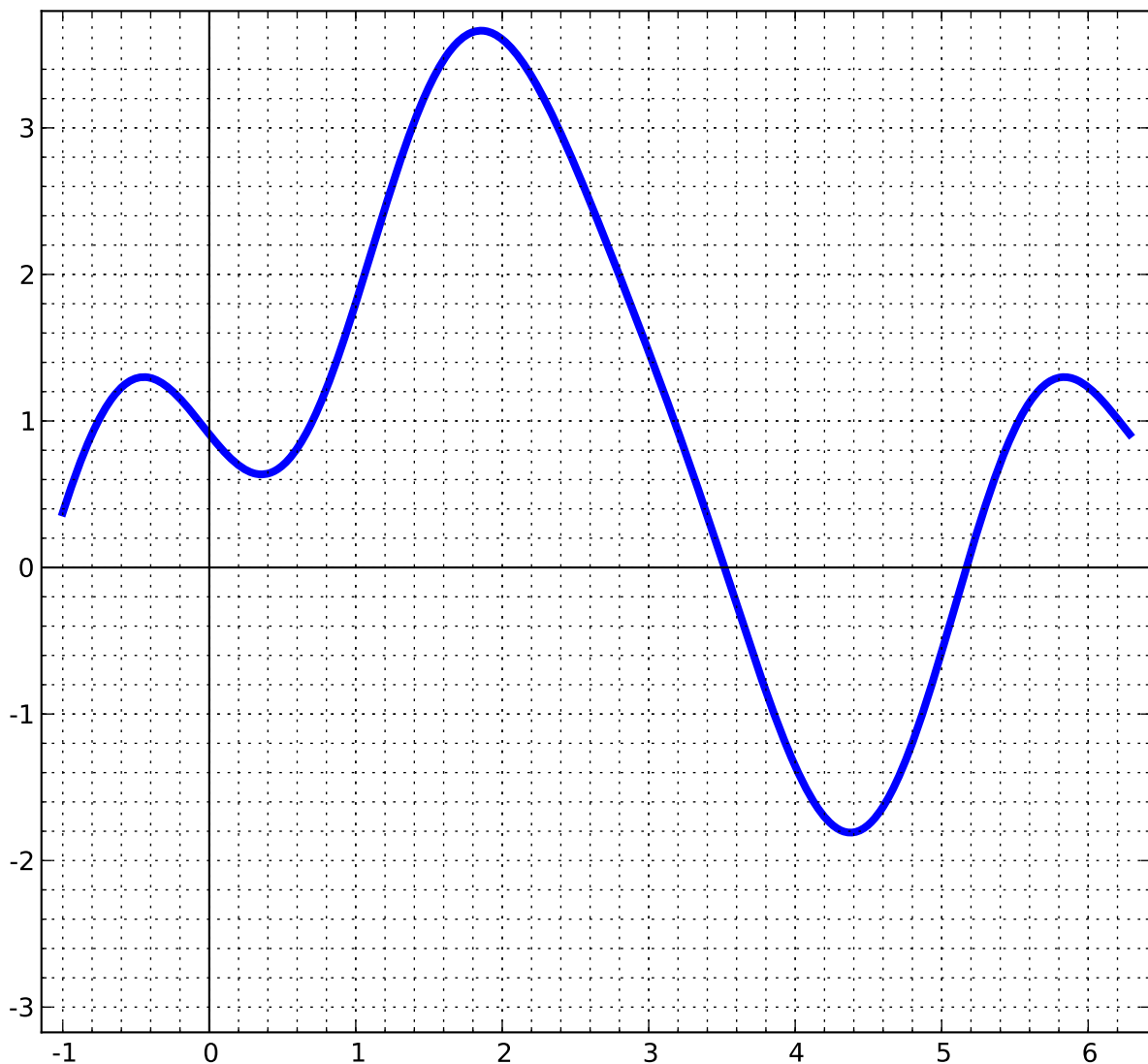
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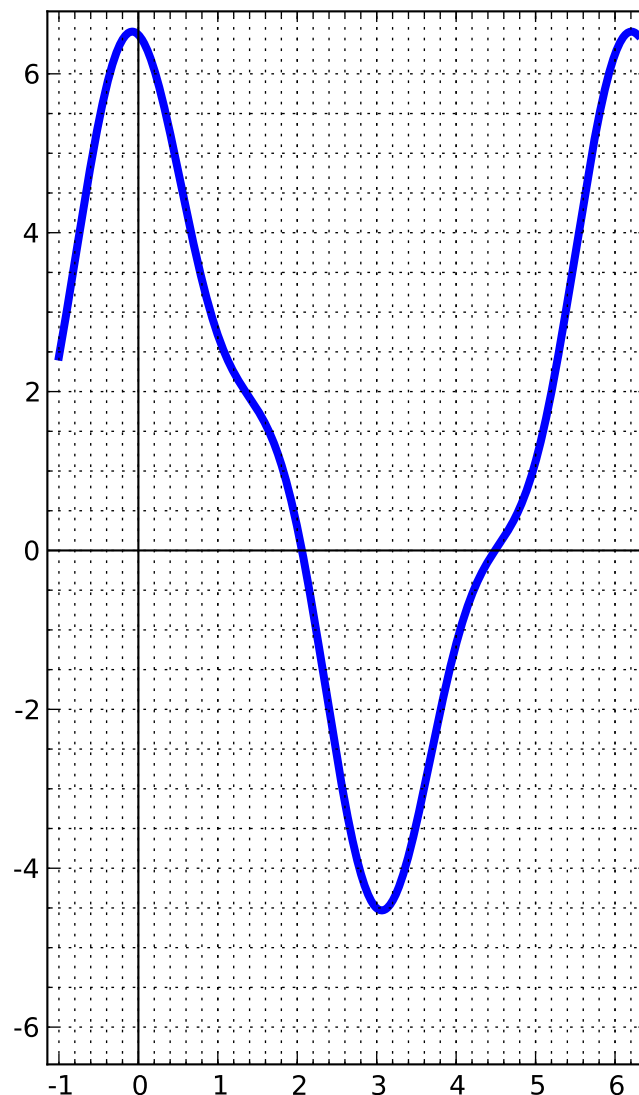
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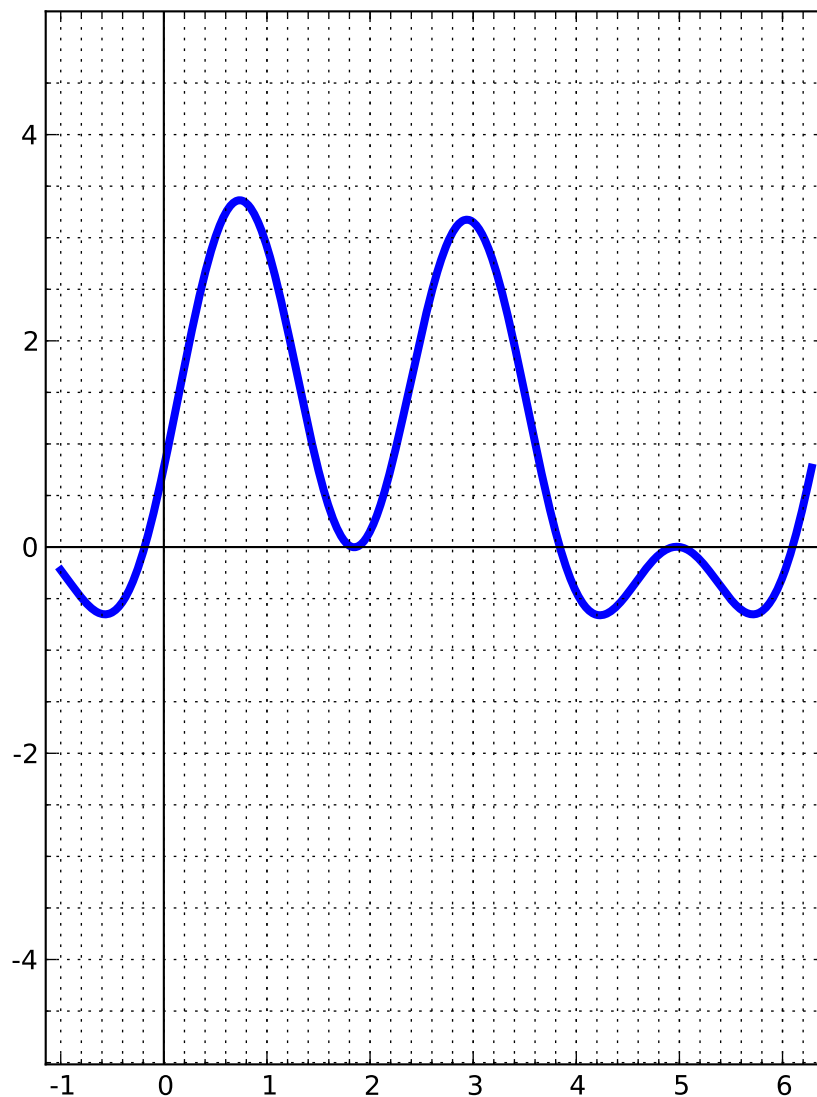
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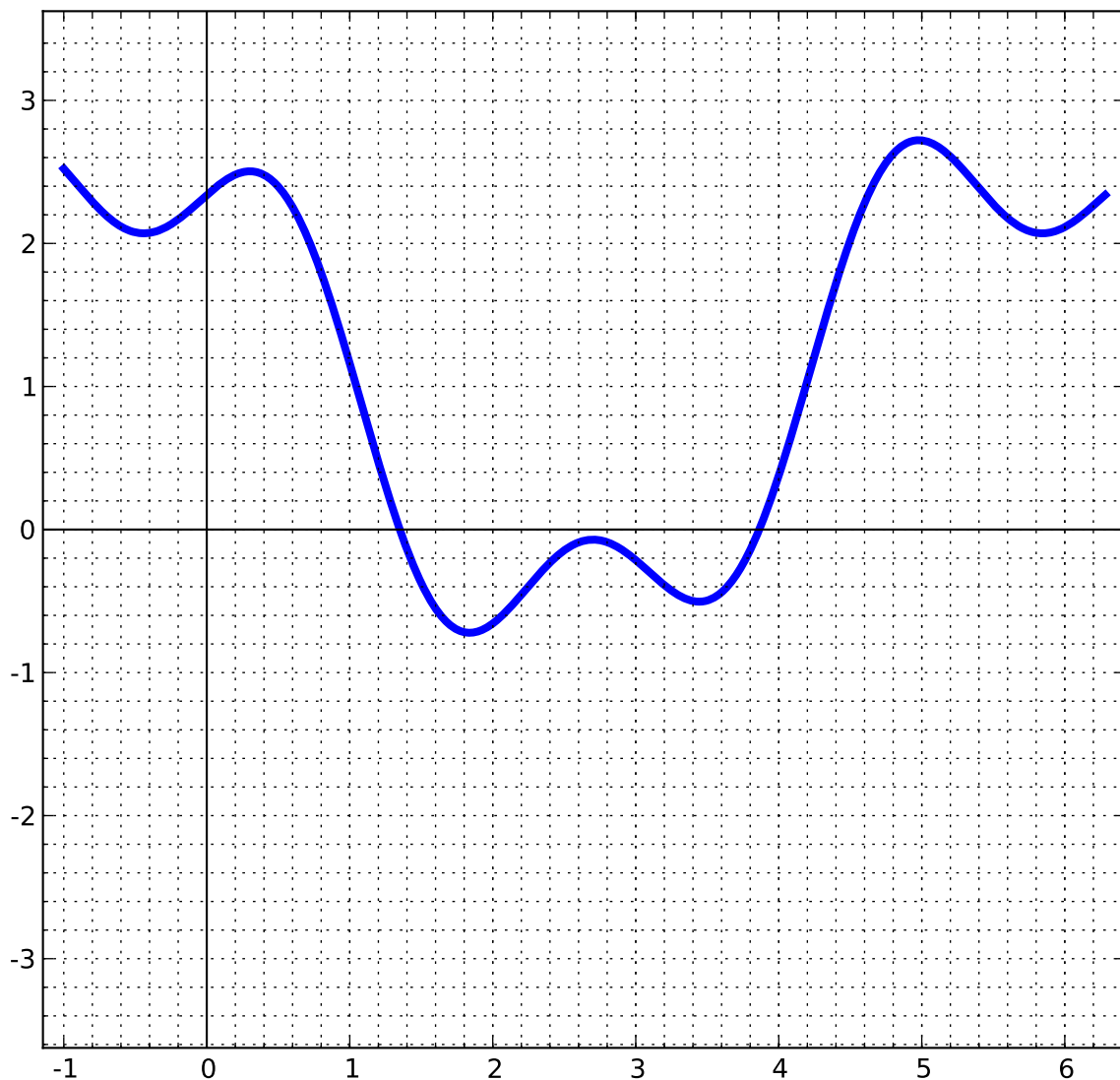
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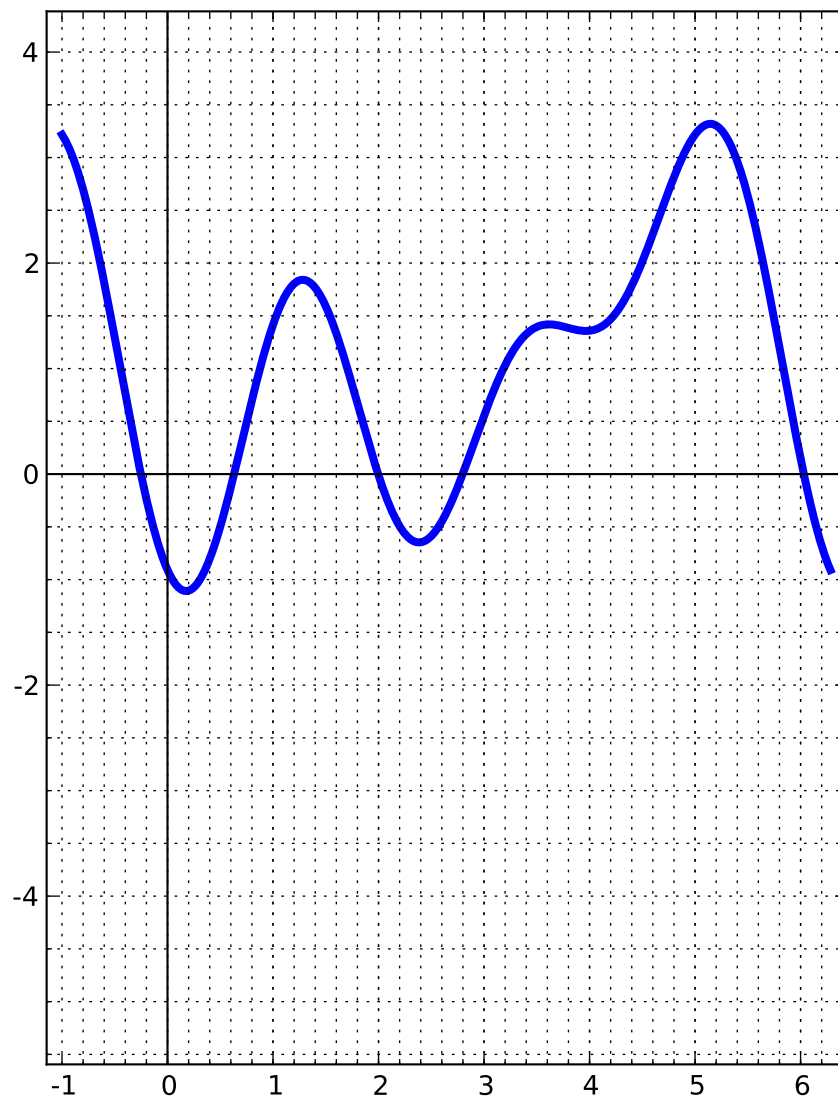
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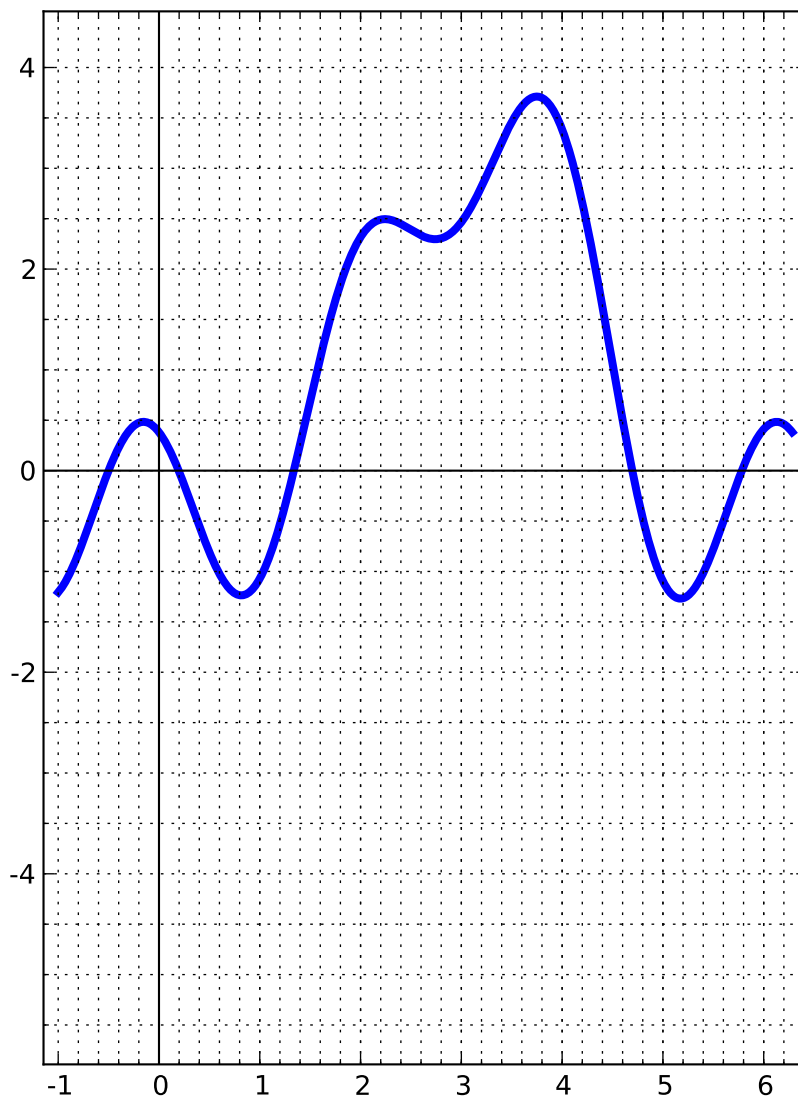
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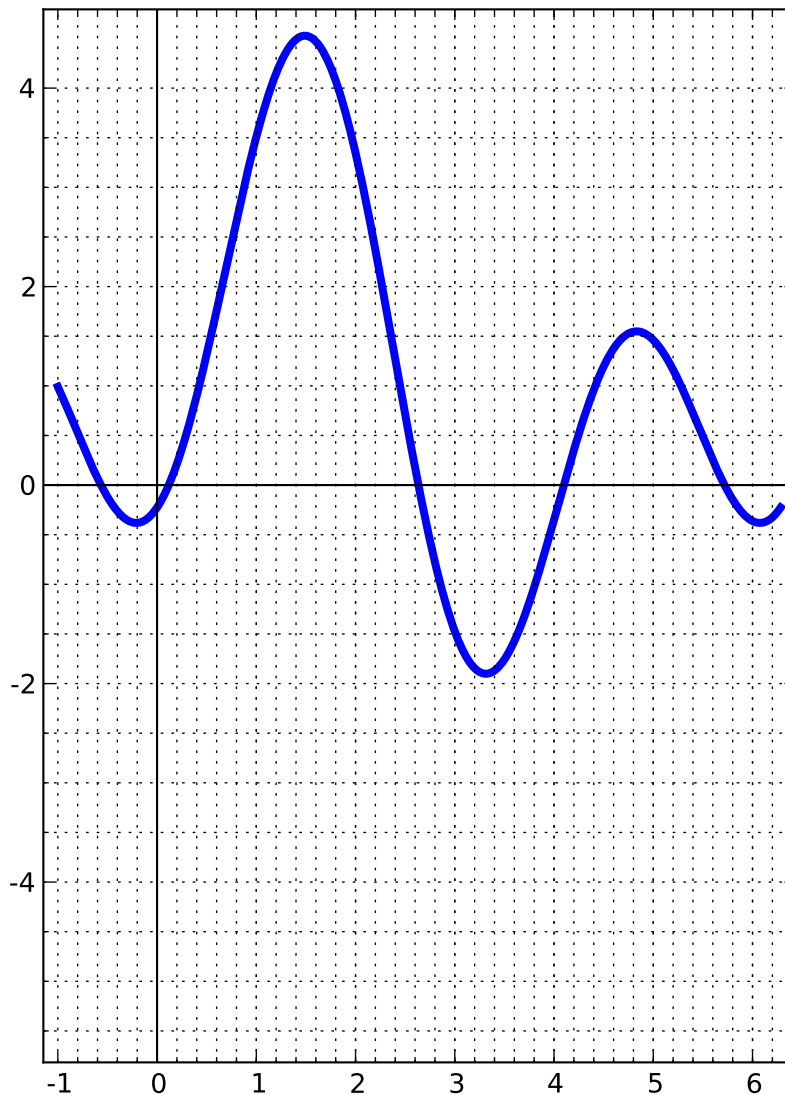
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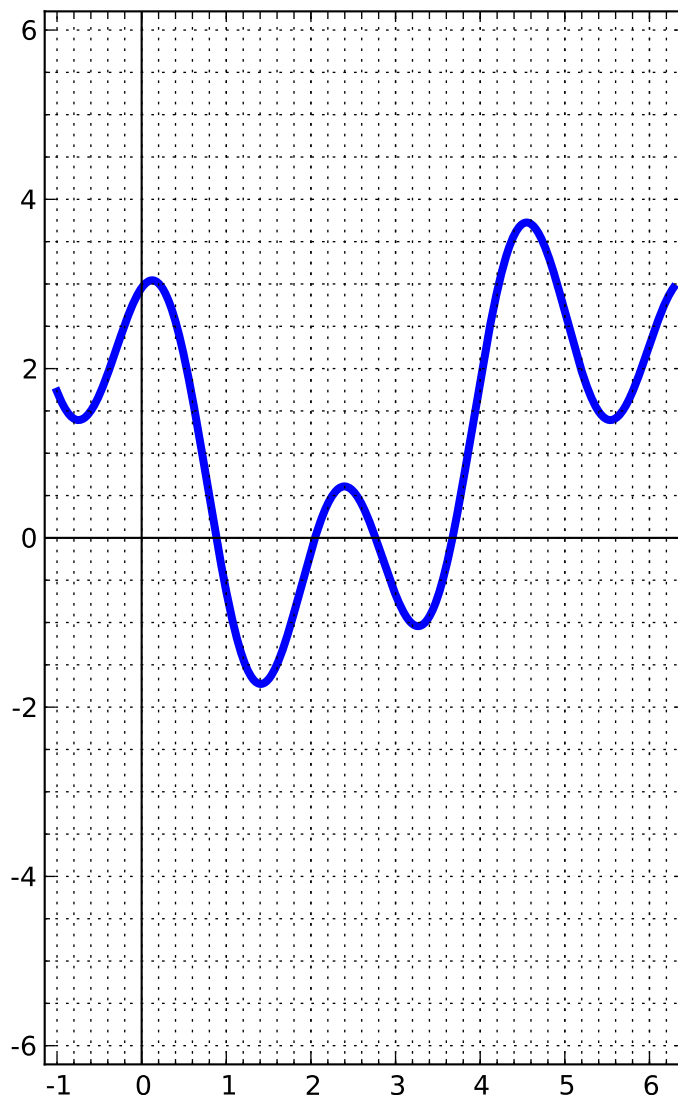
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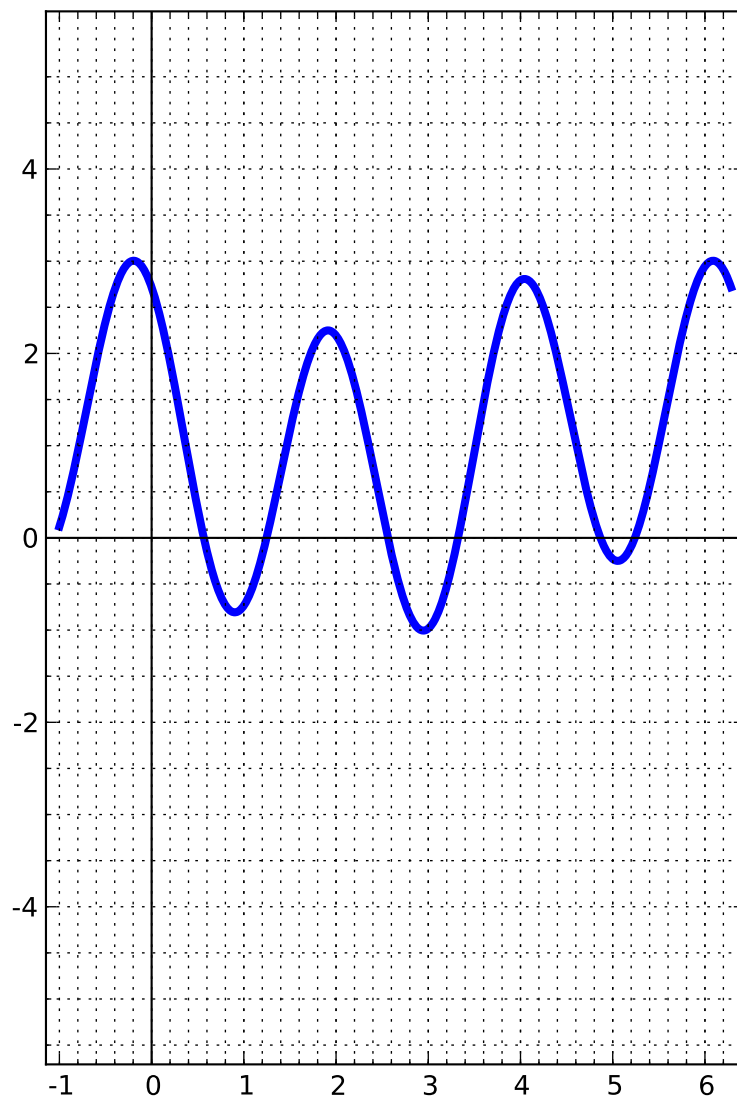
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$$f(x) = \sin(x+1) - \cos(-3x+1) - \cos(-x+2) + 2\cos(-3x) - \cos(x) + 1.$$

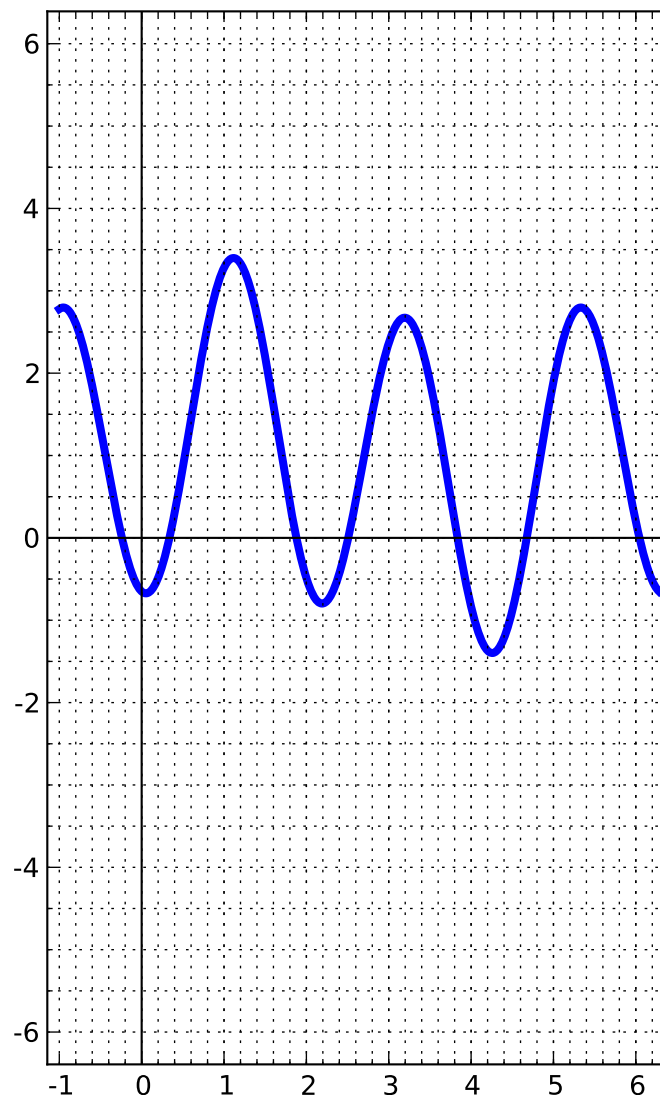
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = -\sin(-3x + 2) + \sin(-x + 1) - \cos(x + 2) - \cos(-3x) - \cos(x) + 1.$$

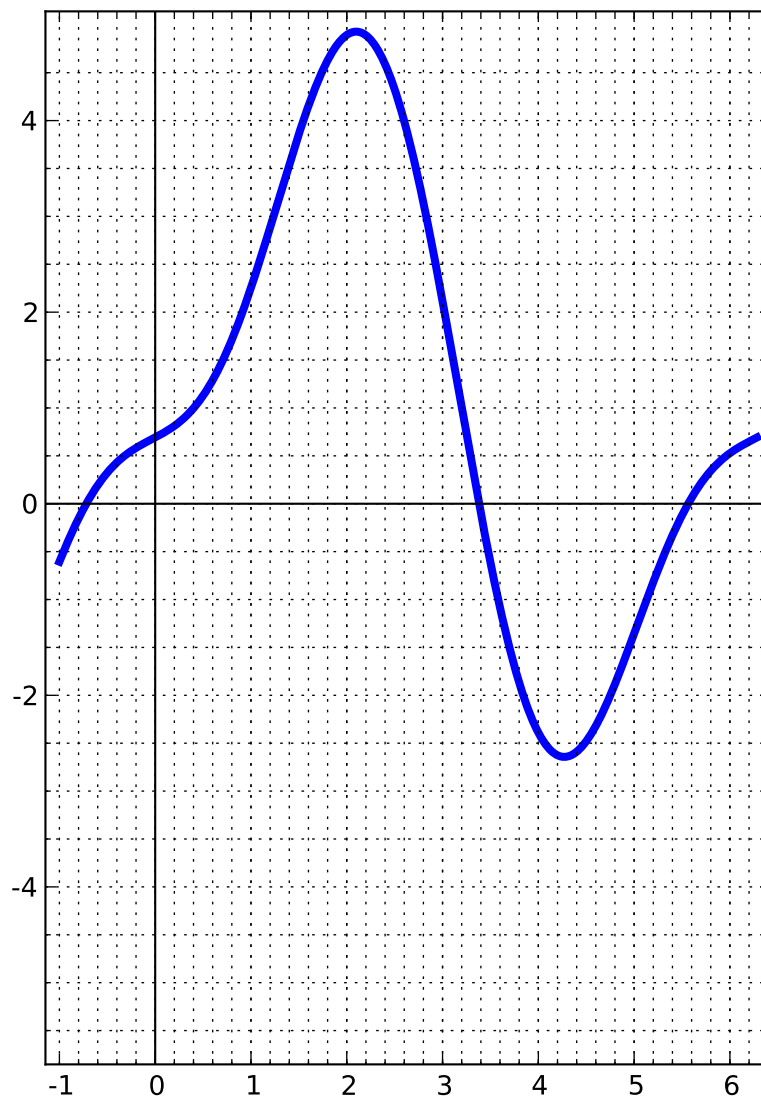
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = 2 \sin(x + 1) + \sin(2x + 1) + 2 \sin(x) + 2 \cos(2x + 2) - 2 \cos(x) + 1.$$

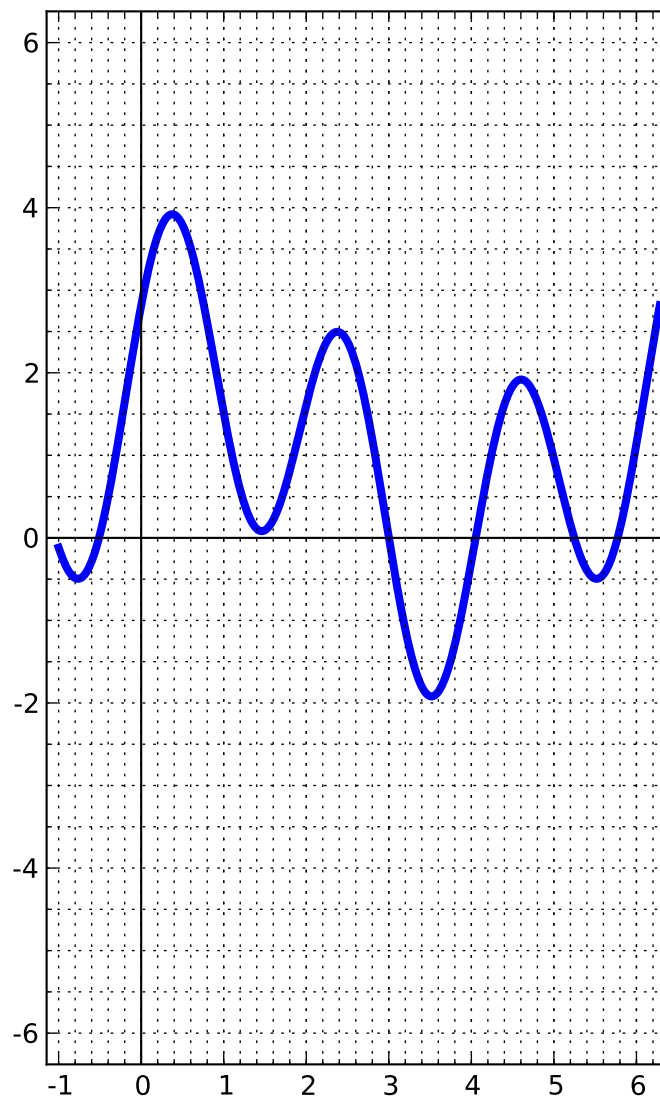
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = -\sin(-x+1) + 2\sin(x+2) + \sin(3x+1) + \sin(3x) + \sin(x) + 1.$$

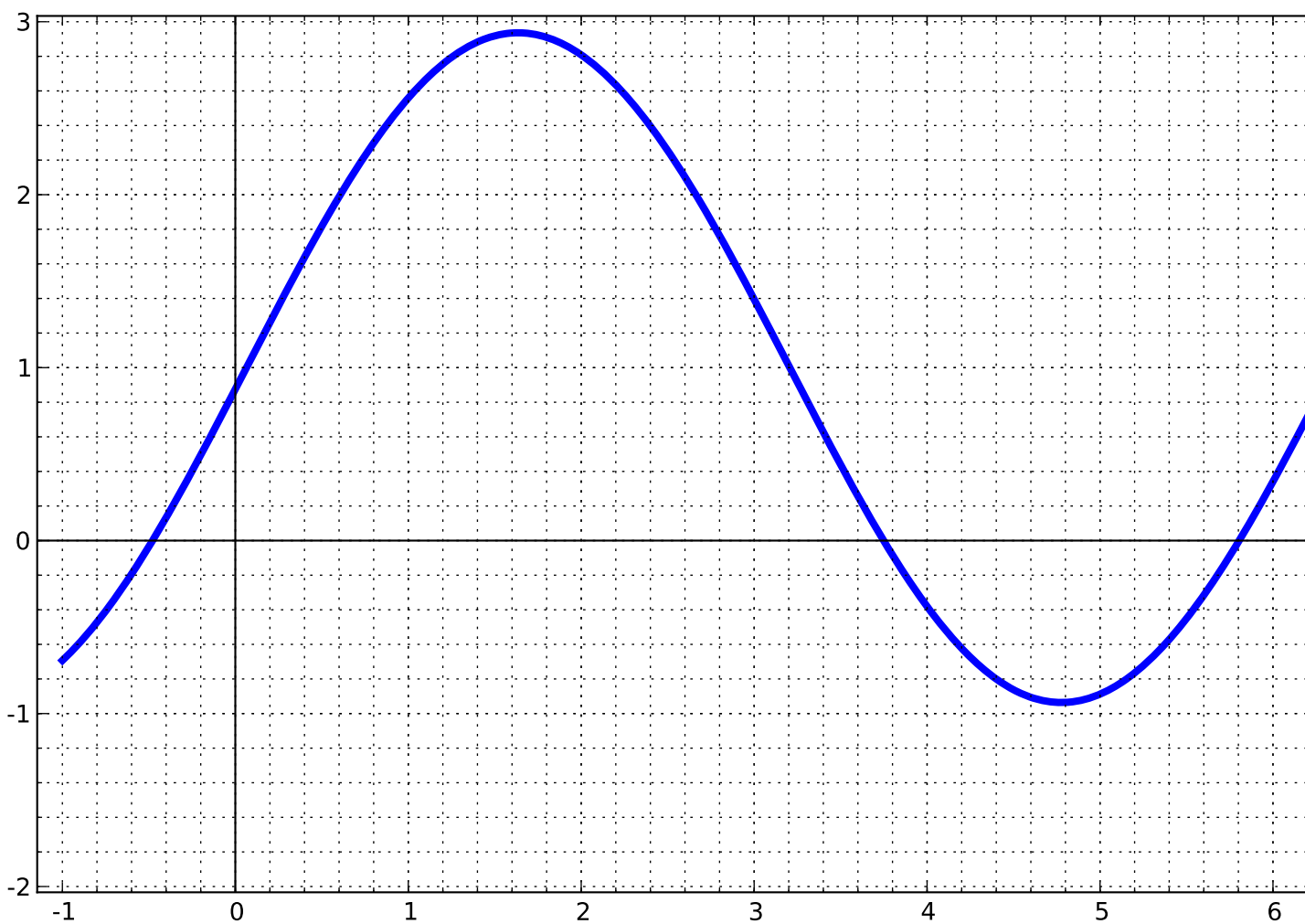
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = 2 \sin(x) - \cos(-x + 2) - \cos(x + 1) + 1.$$

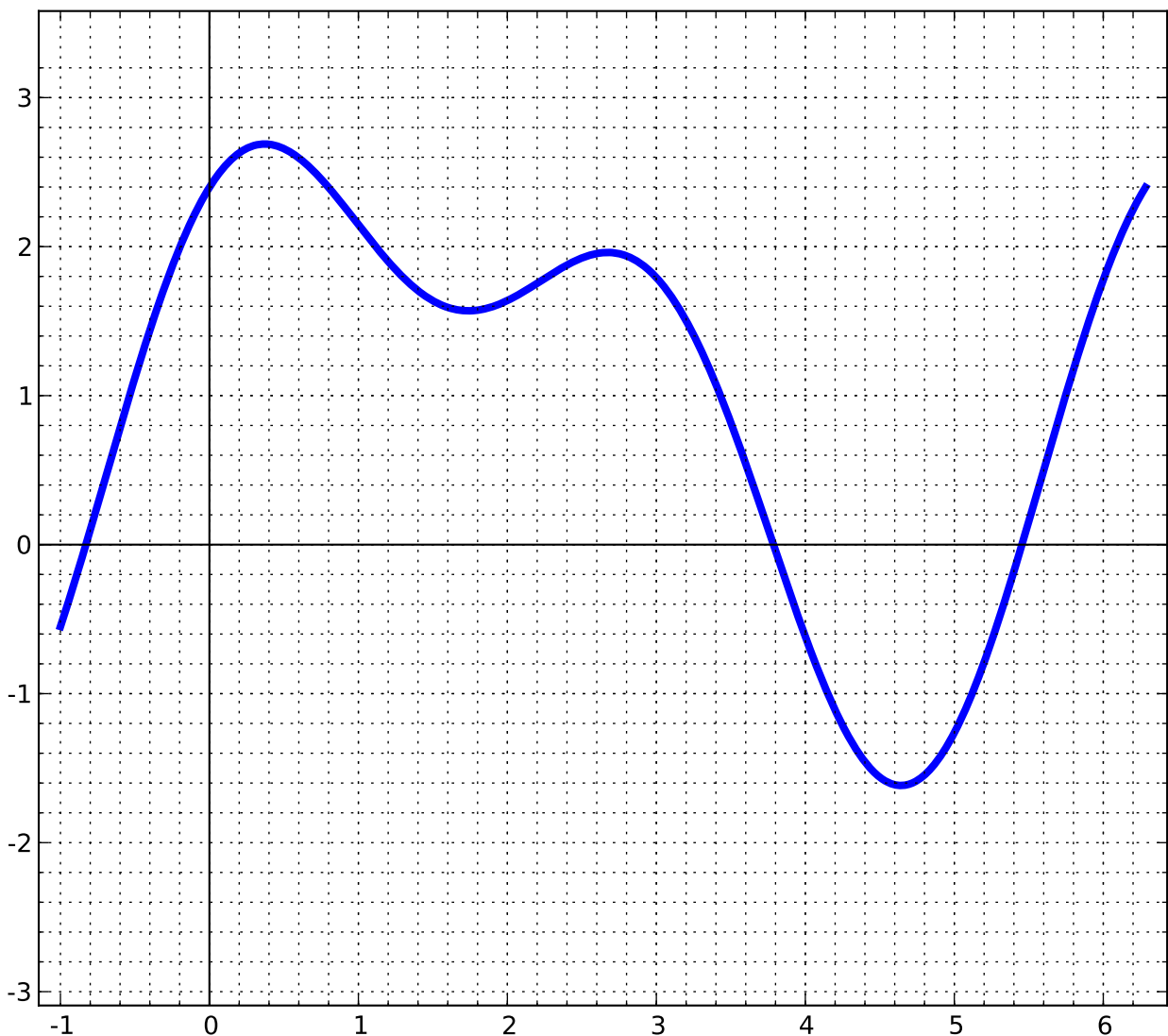
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = -2 \sin(x + 1) + \sin(x) + 2 \cos(-x + 1) + \cos(-2x) + \cos(-x) + 1.$$

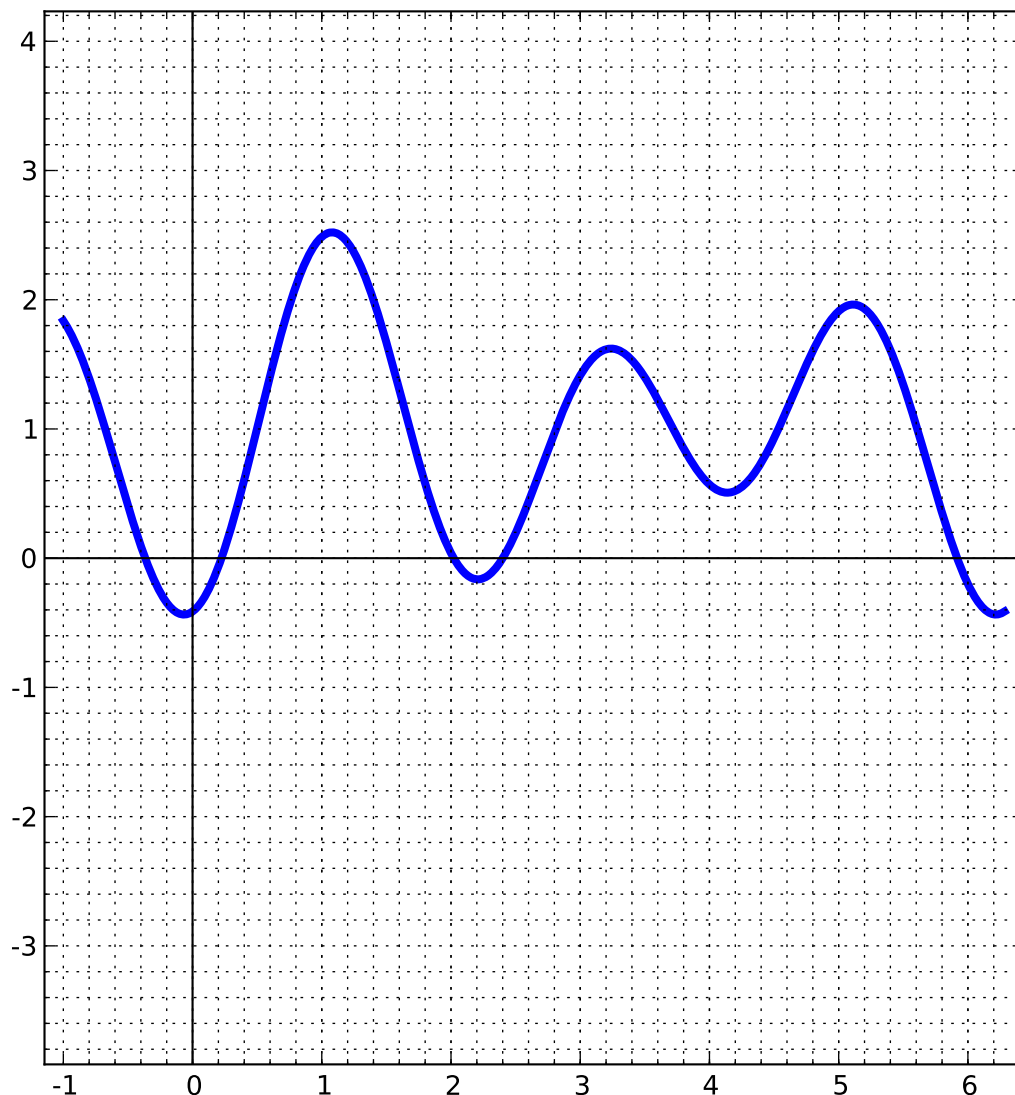
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = -\sin(-2x + 2) + 2\cos(-2x + 1) - \cos(-2x + 2) - \cos(-3x) - \cos(-2x) + 1.$$

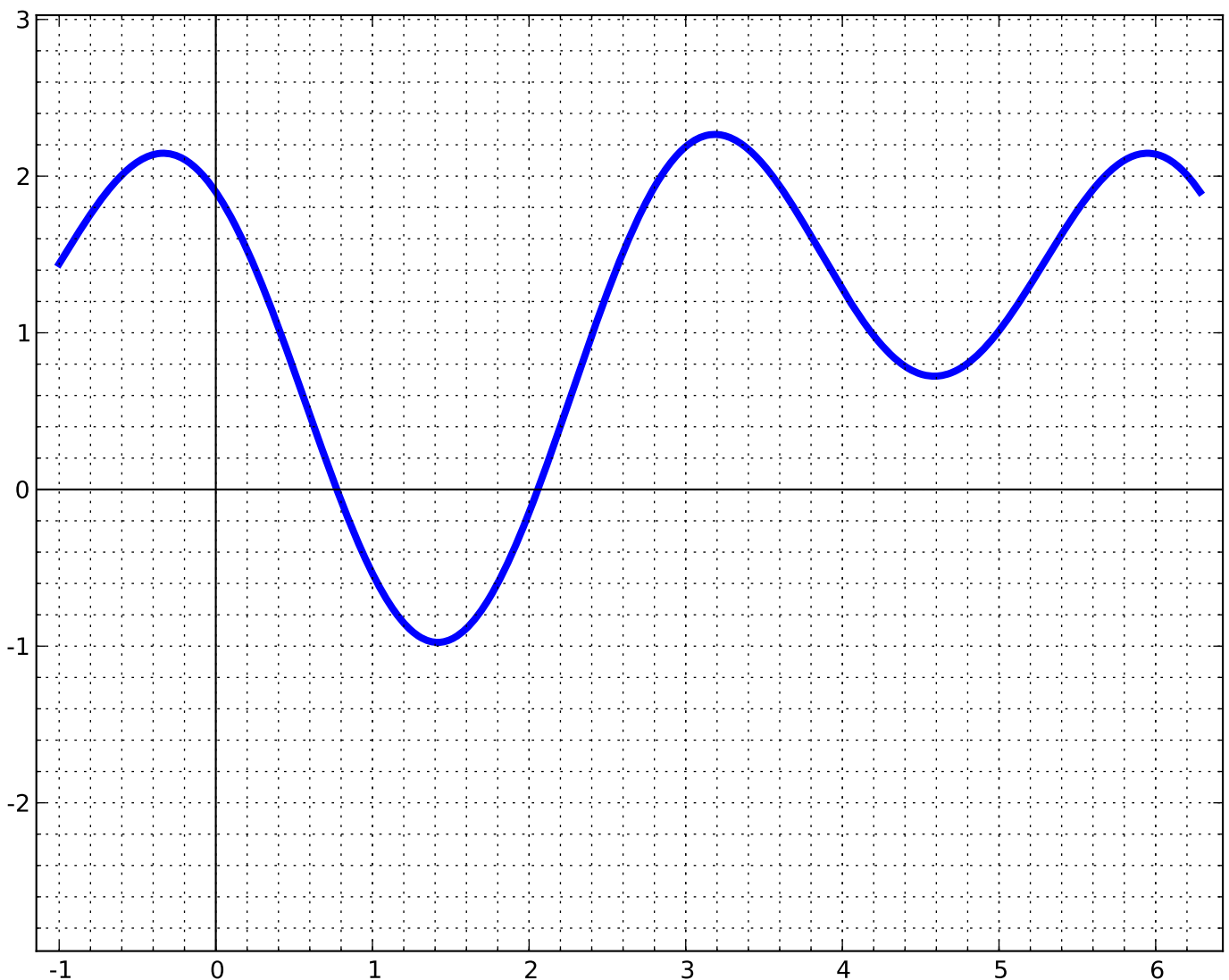
The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = 2 \sin(x + 2) + \sin(-2x) - \sin(2x) + 2 \cos(-2x + 1) - 2 \cos(x) + 1.$$

The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.



Below is a plot of

$$f(x) = 2 \sin(-2x + 1) + \cos(-2x + 2) + \cos(-x + 2) - \cos(3x + 1) + \cos(3x) + 1.$$

The *derivative* of $f(x)$ is the function whose value at x is the *slope* of the graph of f at x . Plot the derivative of $f(x)$ by sketching the tangent line to the graph at maybe 10 points, and at each point, plot the slope of that line, then connect your points (it's a good idea to include all points at which the derivative is 0). There is enough space vertically to fit the derivative. *After* you finish carefully plotting the derivative, enter $f(x)$ into Sage, and plot `f.derivative()` to check your work.

