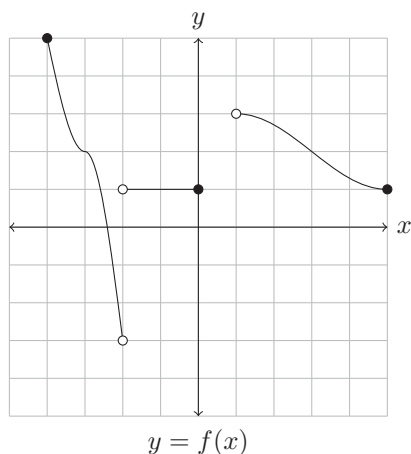
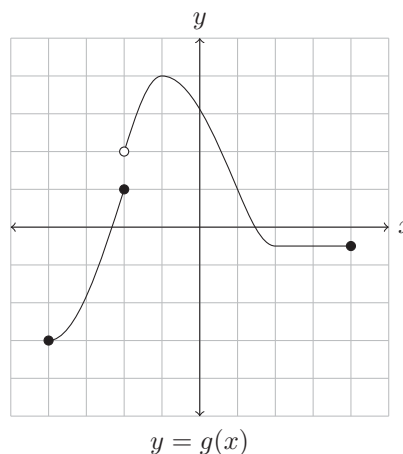


1. For each of the following graphs, determine where the function is increasing, decreasing, and constant. State any local and absolute maximums or minimums along with their locations. Estimate any inflection points and state where the function is concave up and concave down.

a.



b.

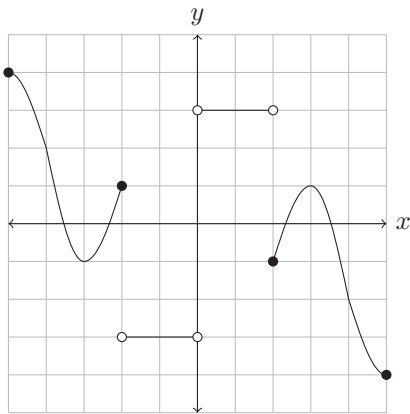


2. Graph the following functions on your calculator, use the minimum and maximum features of the calculator to determine any local or absolute minimums and maximums along with their locations and then state where the function is increasing, decreasing, or constant. Estimate the inflection points and then state where the function is concave up or concave down.

a. $h(x) = x^4 - 4x^3 - 26x^2 + 60x - 20$

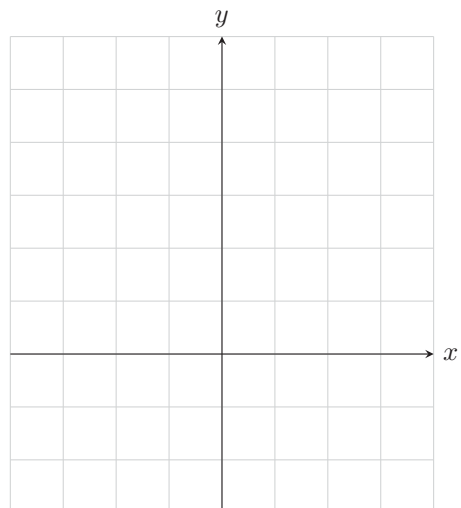
b. $j(x) = \frac{3x^2 + 1}{5x - 4}$

3. Determine whether the following function is even, odd, or neither by looking at its graph.

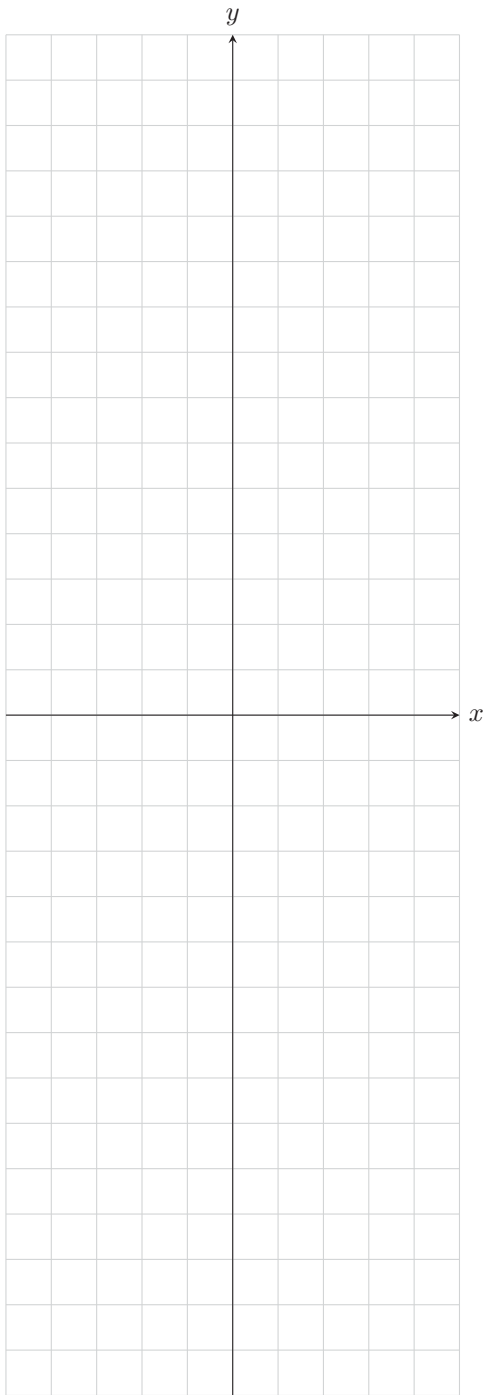


4. Determine whether the function $f(x) = \frac{-3x^5 - x^3 + x}{x - 5x^7}$ is even or odd.

5. Compare the function $y = \text{sqr}(x)$ to the function $h(x) = \left(\frac{3}{2}x\right)^2$ via a table and a graph and then state in words what is occurring.



6. Compare the function $y = \text{cube}(x)$ to the function $\text{cubemin4}(x) = x^3 - 3.5$ via a graph and then state in words what is occurring.



7. Given the following graph of $y = g(x)$, draw the graph of $y = g(x + 4)$.

