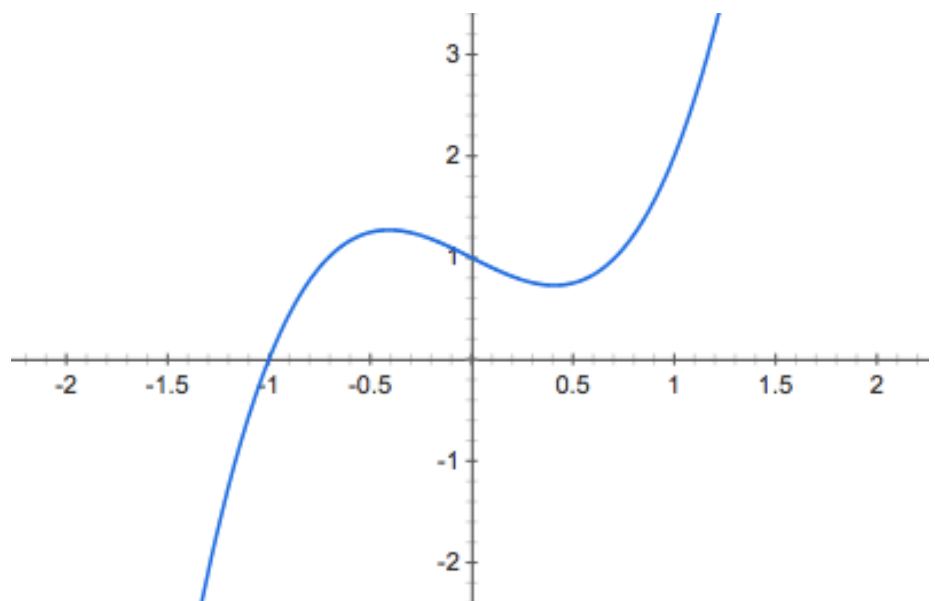


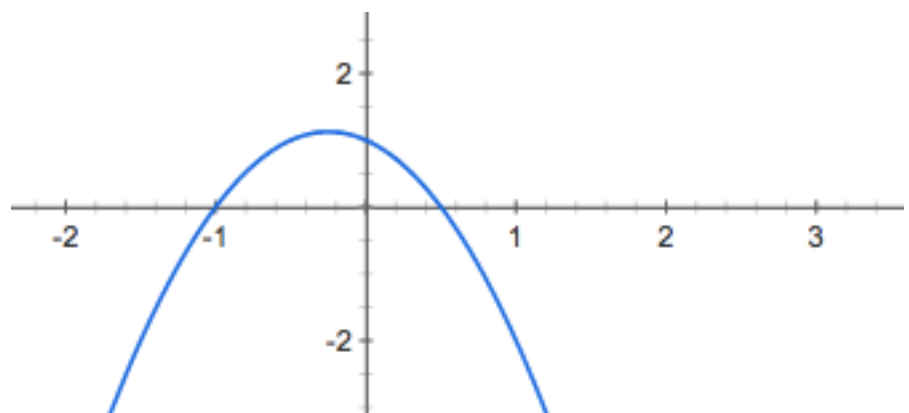
Determine the tangent line at $x=1$ for the following function. Plot the tangent line on the provided plot.

$$y = 2x^3 - x + 1$$



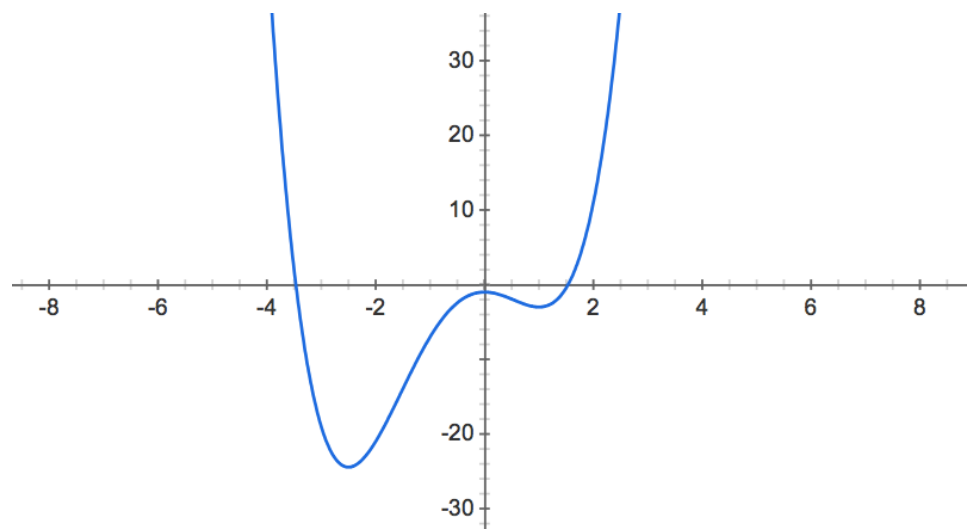
Determine the tangent line at $x=0$ for the following function. Further, determine where the tangent line crosses the x -axis. Plot the tangent line on the provided plot.

$$y = -2x^2 - x + 1$$



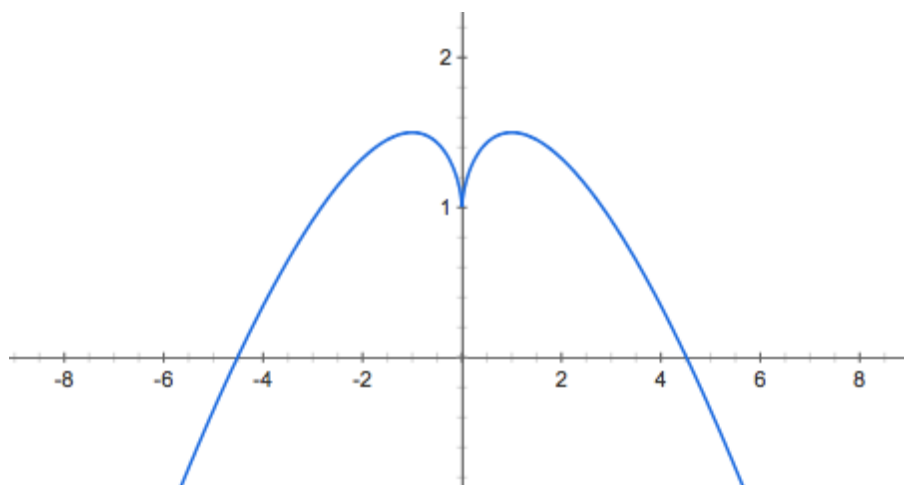
Determine the inflection points, concavity and tangent line at $x=2$ for the following function. Plot the inflection points and tangent line on the provided plot.

$$y = x^4 + 2x^3 - 5x^2 - 1$$



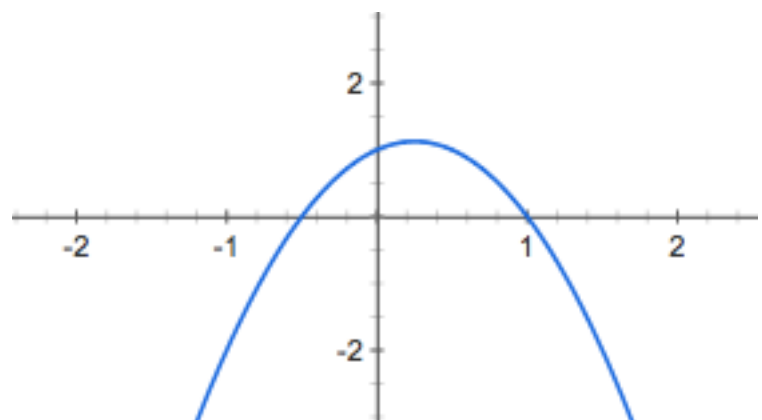
Determine the inflection points, concavity and tangent line at $x=0.5$ for the following function. Further, determine where the tangent line crosses the x -axis. Plot the inflection points and tangent line on the provided plot.

$$y = -\frac{x^{\frac{7}{3}} - 2x^{\frac{5}{3}}}{2x} + 1$$



Determine the tangent line that crosses the x-axis at $x=2$. Plot the tangent line on the provided plot.

$$y = -2x^2 + x + 1$$



Determine the tangent line that crosses the y-axis at $y=2$. Plot the tangent line on the provided plot.

$$y = -2x^2 + x + 1$$

