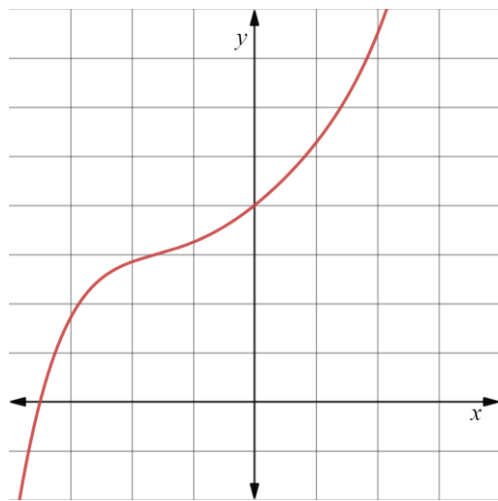
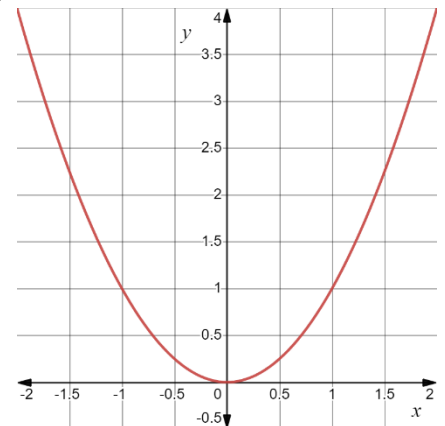


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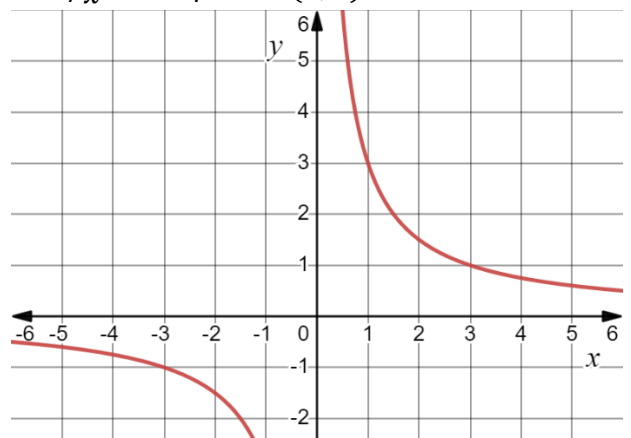
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Learning Goal 2.2

Limits at infinity and the definition of the derivative

Recall the difference quotient**Definition of the derivative****Example** Find the equation of the tangent line to the parabola $y = x^2$ at the point $P(1, 1)$.

Example What is the slope of the tangent line to the function $y = 3/x$ at the point $P(3, 1)$.



Example Find $R'(x)$ given $R(x) = \sqrt{5x - 8}$ using the definition of the derivative.