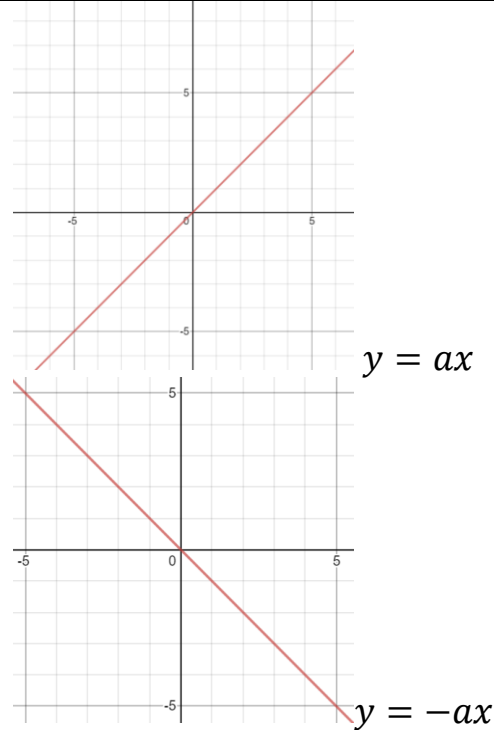
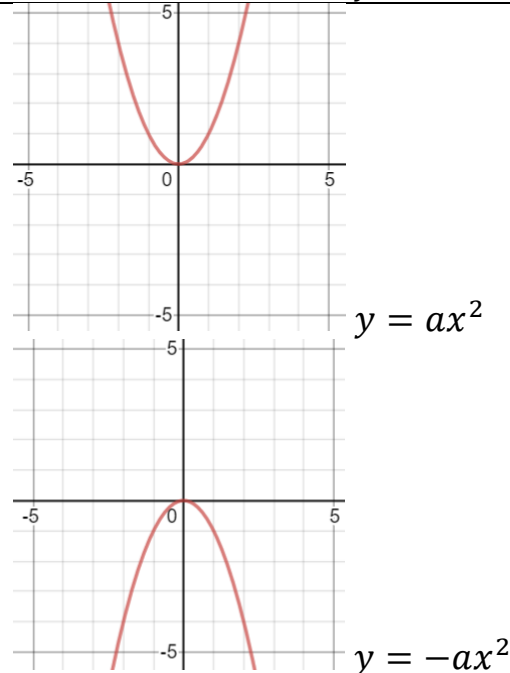
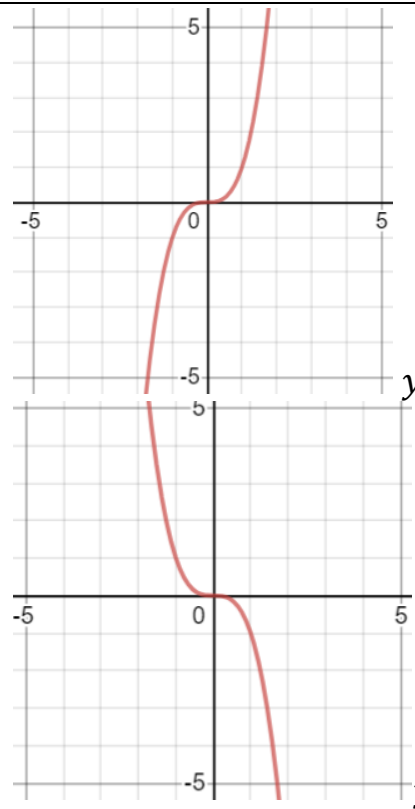
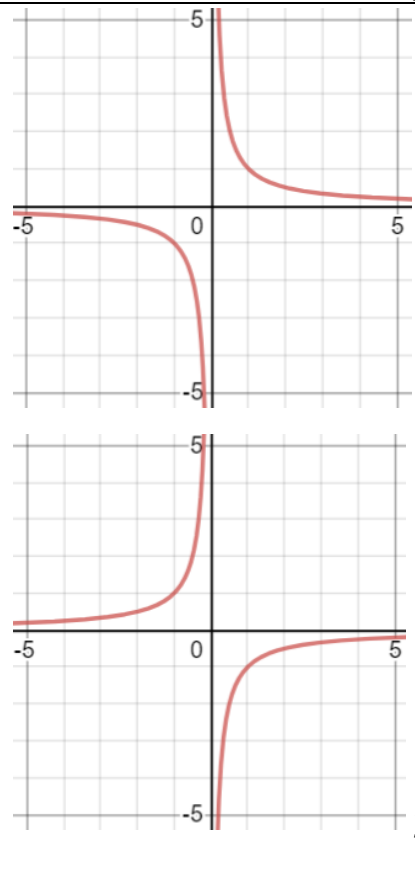
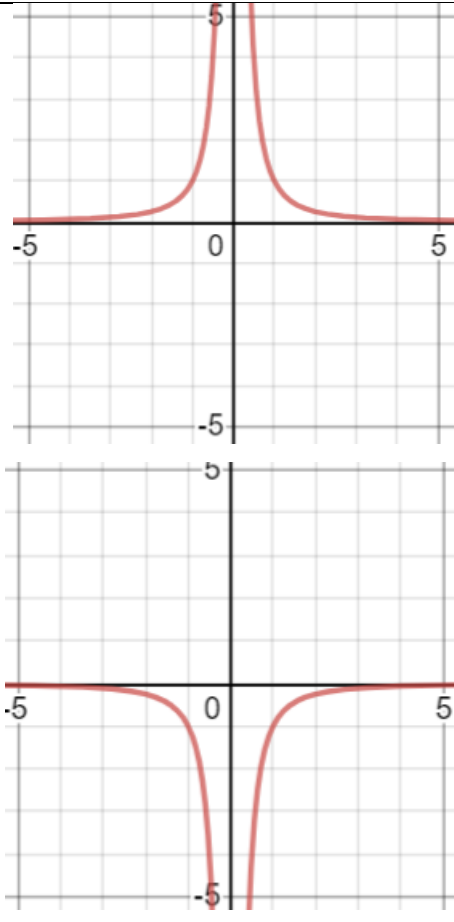
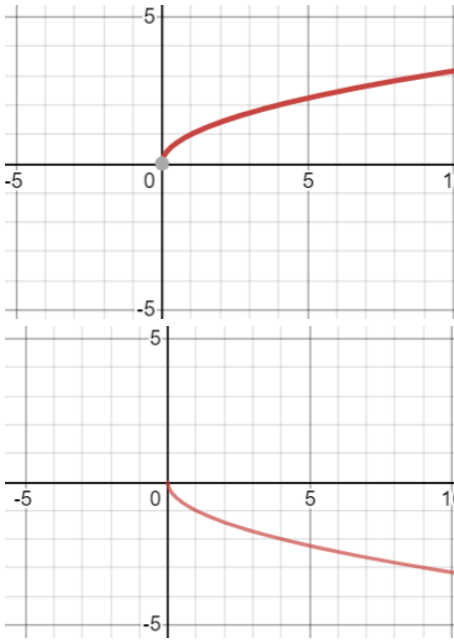

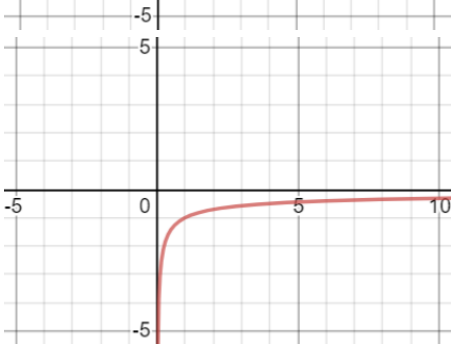
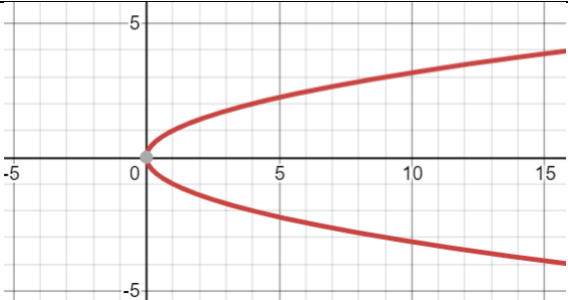
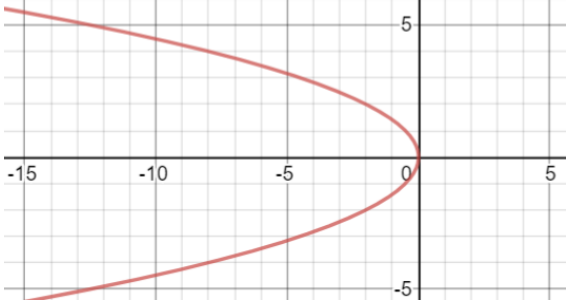


Further Coordinates Geometry

1	General Equation of circle	$(x - a)^2 + (y - b)^2 = r^2$ <p style="text-align: center;"><i>Center of Circle = (a, b)</i> <i>radius = r</i> <i>Any point on circle = (x, y)</i></p>
2	Curve Equation $y = ax^n$ $n = 1$	 <p style="text-align: right;">$y = ax$</p> <p style="text-align: right;">$y = -ax$</p>
	$y = ax^2$ $n = 2$	 <p style="text-align: right;">$y = ax^2$</p> <p style="text-align: right;">$y = -ax^2$</p>

	$y = ax^3$ $n = 3$	 <p>The figure shows two separate coordinate planes. The top plane displays the graph of $y = ax^3$, which is a red curve passing through the origin (0,0) and increasing from the third quadrant to the first quadrant. The bottom plane displays the graph of $y = -ax^3$, which is a red curve passing through the origin (0,0) and decreasing from the second quadrant to the fourth quadrant. Both graphs are plotted on a grid with x and y axes ranging from -5 to 5.</p>
	$y = ax^{-1} = \frac{a}{x}$ $n = -1$	 <p>The figure shows two separate coordinate planes. The top plane displays the graph of $y = \frac{a}{x}$, which consists of two red hyperbolic branches: one in the first quadrant and one in the third quadrant, with the x-axis and y-axis as asymptotes. The bottom plane displays the graph of $y = -\frac{a}{x}$, which consists of two red hyperbolic branches: one in the second quadrant and one in the fourth quadrant, with the x-axis and y-axis as asymptotes. Both graphs are plotted on a grid with x and y axes ranging from -5 to 5.</p>

	$y = ax^{-2} = \frac{a}{x^2}$ $n = -2$	 <p>The figure shows two separate coordinate planes. The top plane displays the graph of $y = \frac{a}{x^2}$ as a red curve with two branches in the first and second quadrants, approaching the x-axis and y-axis as asymptotes. The bottom plane displays the graph of $y = \frac{-a}{x^2}$ as a red curve with two branches in the third and fourth quadrants, also approaching the x-axis and y-axis as asymptotes. Both graphs are plotted on a grid with x and y axes ranging from -5 to 5.</p>
	$y = ax^{\frac{1}{2}} = a\sqrt{x}$ $n = \frac{1}{2}$	 <p>The figure shows two separate coordinate planes. The top plane displays the graph of $y = a\sqrt{x}$ as a red curve starting at the origin (0,0) and increasing into the first quadrant. The bottom plane displays the graph of $y = -a\sqrt{x}$ as a red curve starting at the origin (0,0) and decreasing into the fourth quadrant. Both graphs are plotted on a grid with the x-axis ranging from 0 to 10 and the y-axis ranging from -5 to 5.</p>
	$y = ax^{-\frac{1}{2}}$	

		 $y = ax^{-\frac{1}{2}}$  $y = -ax^{-\frac{1}{2}}$
3	$y^2 = kx$	 $y^2 = kx, k > 0$  $y^2 = kx, k < 0$