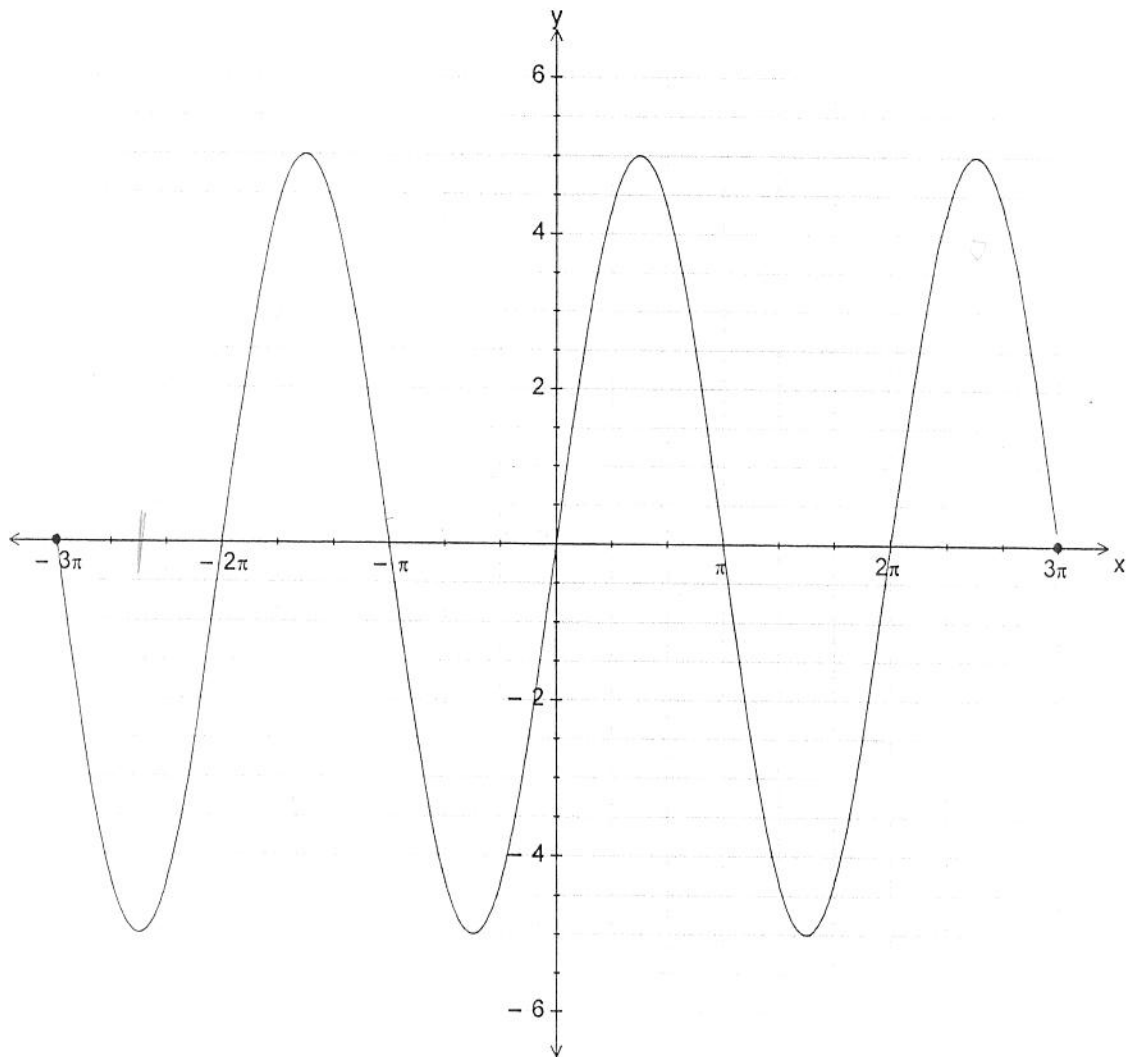
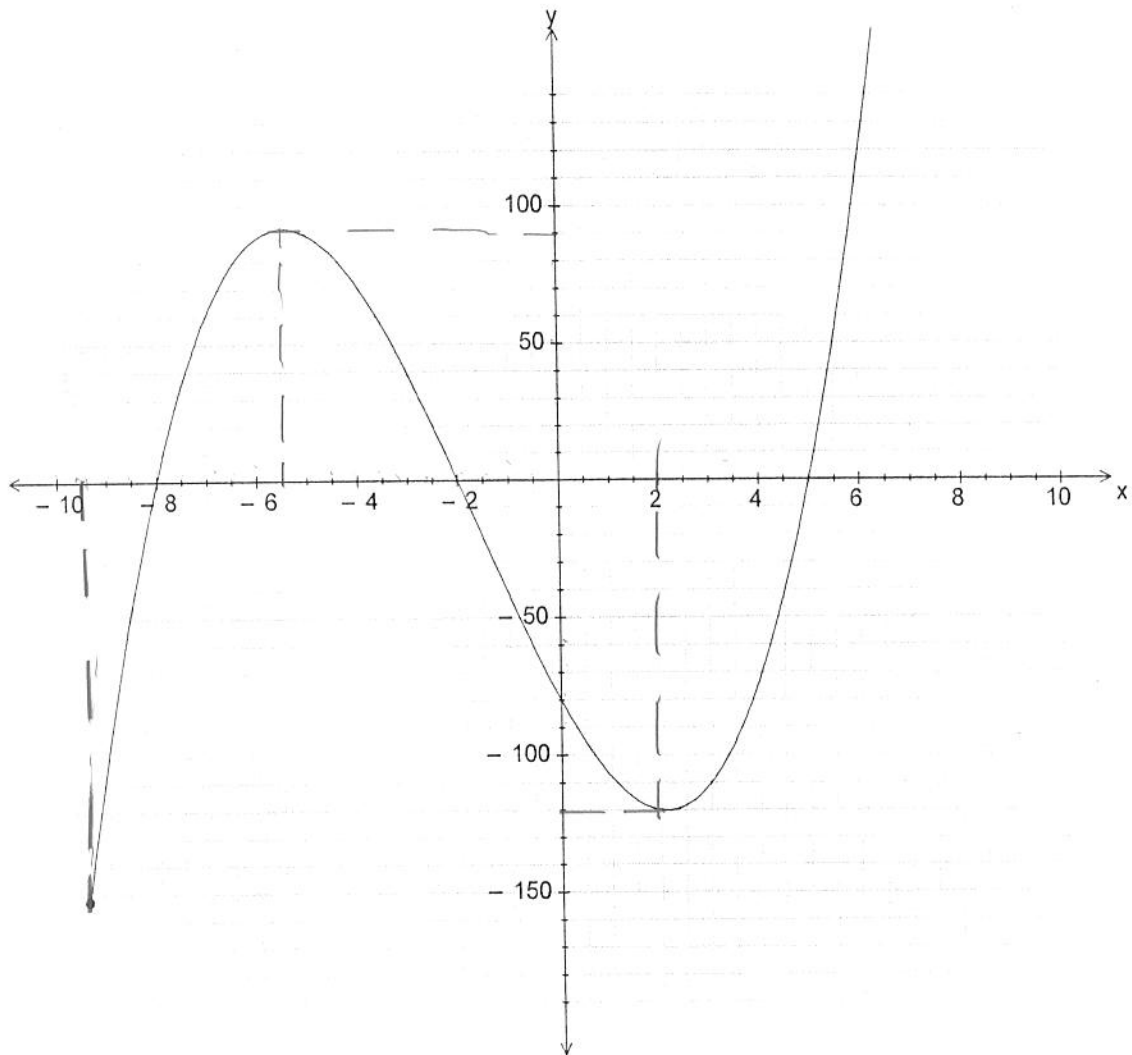


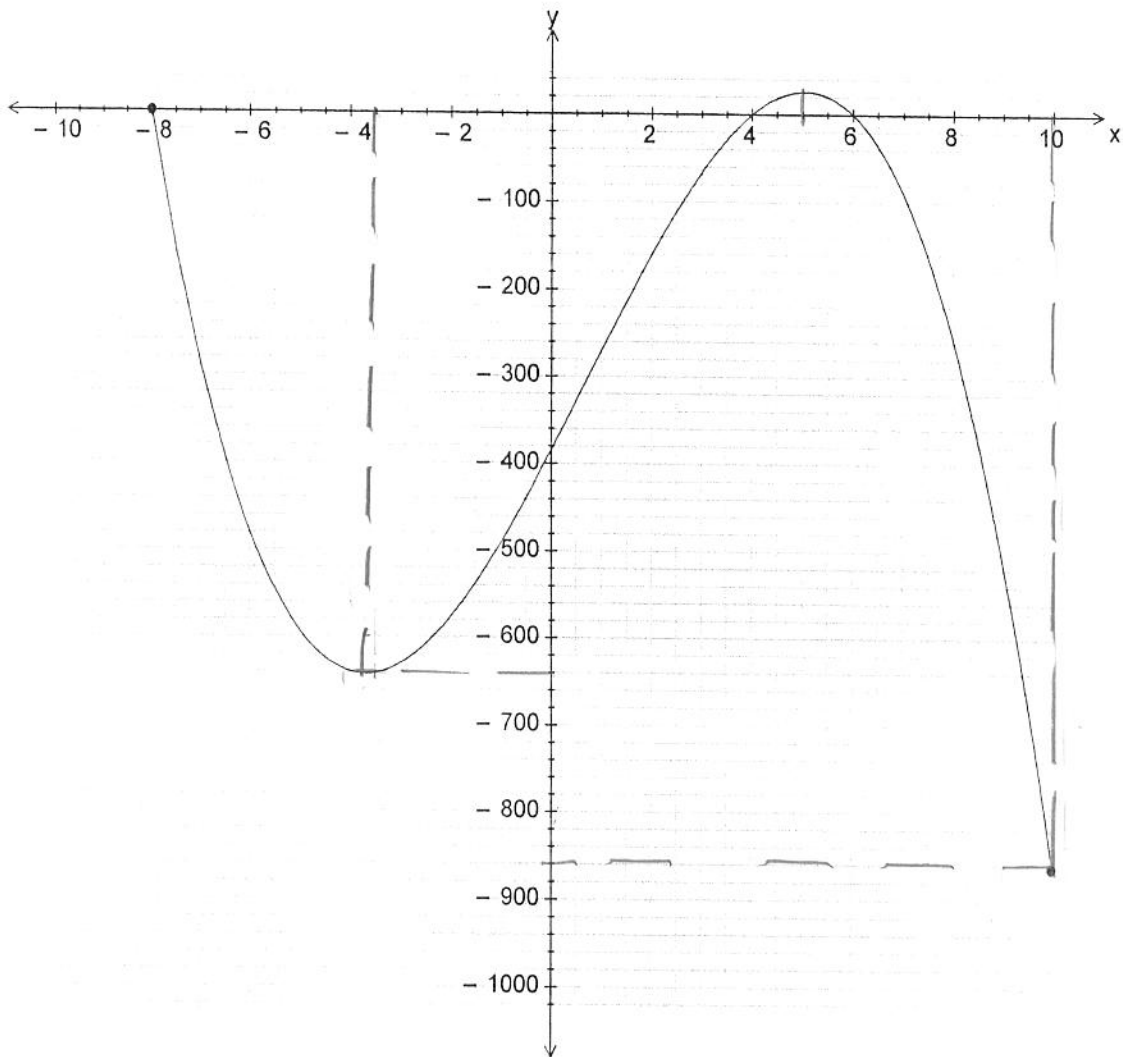
key



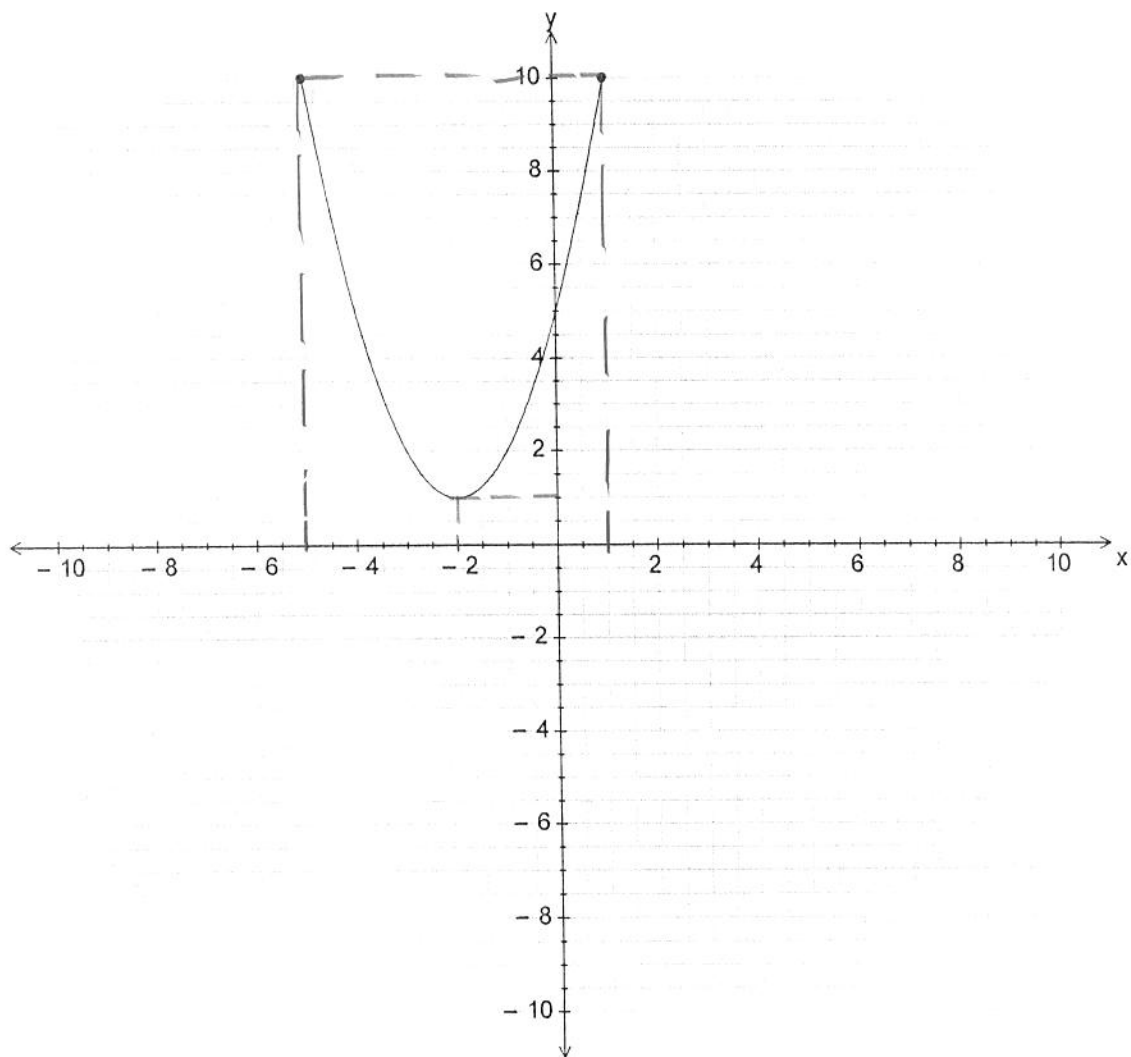
Domain:	$x = [-3\pi, 3\pi]$
Range:	$y = [-5, 5]$
Zero(s) approx.	$x = \{-3\pi, -2\pi, -\pi, 0, \pi, 2\pi, 3\pi\}$
Initial value	$y = \{0\}$
Positive	$x = [-2\pi, -\pi] \cup [0, \pi] \cup [2\pi, 3\pi]$
Negative	$x = [-3\pi, -2\pi] \cup [-\pi, 0] \cup [\pi, 2\pi]$
Absolute Max	$y = \{5\}$
Relative Max	None \emptyset (All the peaks have $y = \text{Absolute max}$)
Absolute Min	$y = \{-5\}$
Relative Min	None \emptyset (All valleys have $y = \text{Absolute min}$)
Increasing	$x = [-2.5\pi, -1.5\pi] \cup [-0.5\pi, 0.5\pi] \cup [1.5\pi, 2.5\pi]$
Decreasing	$x = [-3\pi, -2.5\pi] \cup [-1.5\pi, -0.5\pi] \cup [0.5\pi, 1.5\pi] \cup [2.5\pi, 3\pi]$



Domain:	$x = [-9, \infty[$
Range:	$y = [-150, \infty[$
Zero(s) approx.	$x = \{-8, -2, 5\}$
Initial value	$y = \{-80\}$
Positive	$x = [-8, -2] \cup [5, \infty[$
Negative	$x = [-10, -8] \cup [-2, 5]$
Absolute Max	None (graph goes to infinite on the right)
Relative Max	$y = \{90\}$
Absolute Min	$y = \{-150\}$
Relative Min	$y = \{-120\}$
Increasing	$x = [-10, -5] \cup [2, \infty[$
Decreasing	$x = [-5, 2]$



Domain:	$x = [-8, 10]$
Range:	$y = [-860, 70]$
Zero(s) approx.	$x = \{-8, 4, 6\}$
Initial value	$y = \{-380\}$
Positive	$x = \{-8\} \cup [4, 6]$
Negative	$x = [-8, 4] \cup [6, 10]$
Absolute Max	$y = \{70\}$
Relative Max	None \emptyset (The only max is the absolute max)
Absolute Min	$y = \{-860\}$
Relative Min	$y = \{-640\}$
Increasing	$x = [-3.5, 5]$
Decreasing	$x = [-8, -3.5] \cup [5, 10]$



Domain:	$x = [-5, 1]$
Range:	$y = [1, 10]$
Zero(s) approx.	None \emptyset
Initial value	$y = \{5\}$
Positive	$x = \mathbb{R}$ or $]-\infty, \infty[$
Negative	Never \emptyset
Absolute Max	$y = \{10\}$
Relative Max	None \emptyset
Absolute Min	$y = \{1\}$
Relative Min	None \emptyset
Increasing	$x = [-2, 1]$
Decreasing	$x = [-5, -2]$