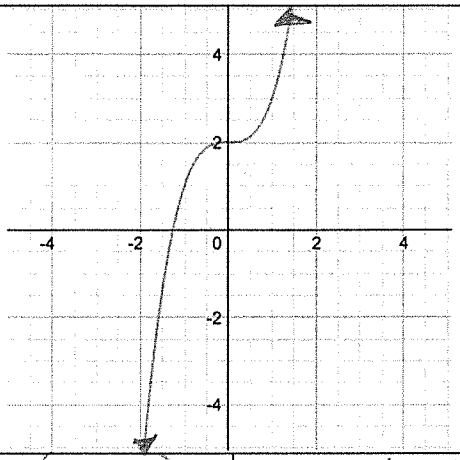
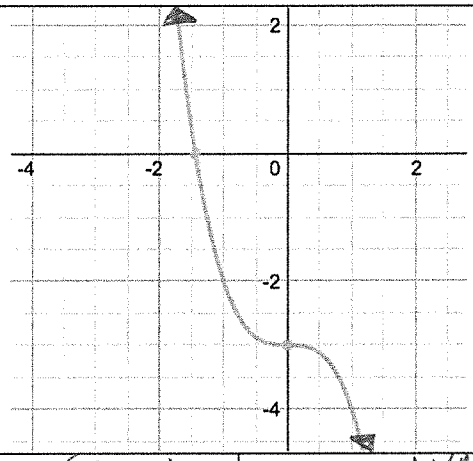
Family: Polynomial (Cubic) Parent equation: $f(x) = x^3$



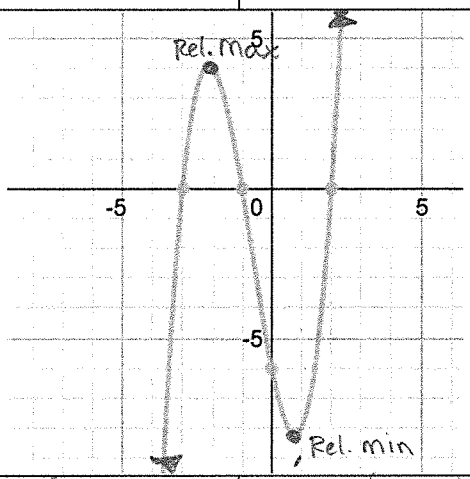
Domain: $(-\infty, \infty)$
Range: $(-\infty, \infty)$
X-intercept: $(-1.25, 0)$
Y-intercept: $(0, 2)$

Increasing: $(-\infty, \infty)$
Decreasing: N/A
As $x \to -\infty$, $f(x) \to -\infty$
End behavior:
As $x \to \infty$, $f(x) \to \infty$
Symmetry: N/A



Domain: $(-\infty, \infty)$
Range: $(-\infty, \infty)$
X-intercept: $(-1.5, 0)$
Y-intercept: $(0, -3)$

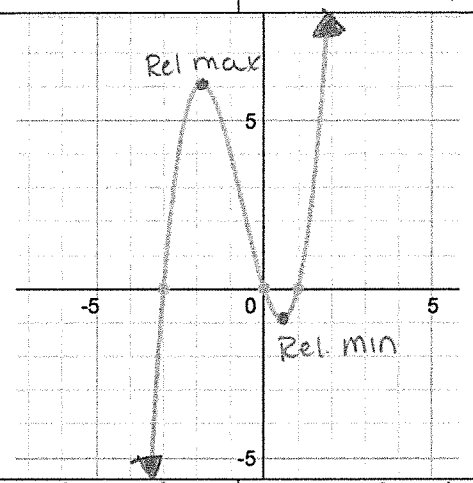
Increasing: N/A
Decreasing: $(-\infty, \infty)$
As $x \to -\infty$, $f(x) \to \infty$
End behavior:
As $x \to \infty$, $f(x) \to -\infty$
Symmetry: N/A



Domain: $(-\infty, \infty)$
Range: $(-\infty, \infty)$
X-intercept: $(2, 0)(-1, 0)(-3, 0)$
Y-intercept: $(0, -6)$

Increasing: $(-\infty, -2)(1, \infty)$
Decreasing: $(-2, 1)$
As $x \to -\infty$, $f(x) \to -\infty$
End behavior:
As $x \to \infty$, $f(x) \to \infty$
Symmetry: N/A

Relative max: $(-2, 4)$
Relative min: $(1, -8)$



Domain: $(-\infty, \infty)$
Range: $(-\infty, \infty)$
X-intercept: $(-3, 0)(0, 0)(1, 0)$
Y-intercept: $(0, 0)$

Increasing: $(-\infty, -2)(.5, \infty)$
Decreasing: $(-2, .5)$
As $x \to -\infty$, $f(x) \to -\infty$
End behavior:
As $x \to \infty$, $f(x) = \infty$
Symmetry: N/A

Relative max: $(-2, 6)$
Relative min: $(0.5, -1)$