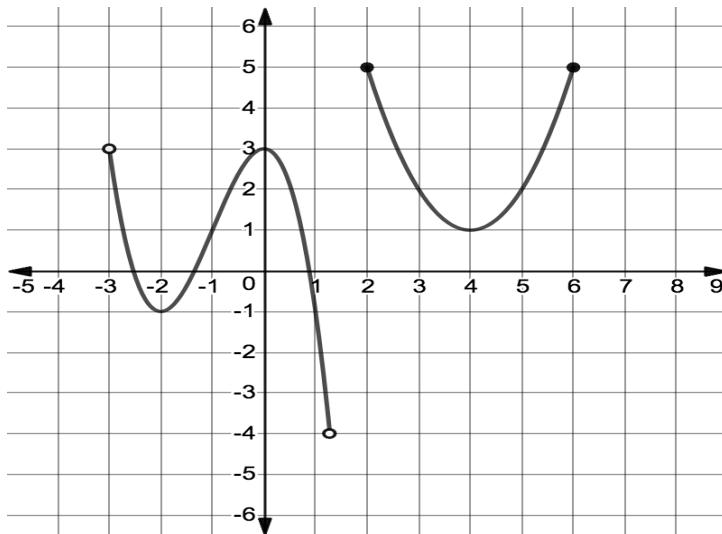


Names: _____

Group #: _____

1. Consider the following graph below.



Identify all relative and absolute extrema, values and locations, if they exist.

(a) Relative Maxima:

(c) Relative Minima:

(b) Absolute Maximum:

(d) Absolute Minimum:

2. Find the absolute maximum and minimum values and their locations of the following functions on the given intervals.

(a) $f(x) = \cos\left(x + \frac{\pi}{2}\right); \left[0, \frac{3\pi}{2}\right]$

(b) $f(x) = \ln(x^2 + 3x + 4); [-2, 2]$

(c) $g(x) = 5x^6 - 6x^5 + 3; (-\infty, \infty)$

(d) $h(x) = 7 - (5 - x^2)^{2/3}; (-\infty, 0)$