1.) (5 pts.) What is the natural domain of the function \( f(x) = \sqrt{x - 2} \)?

We need \( x - 2 \geq 0 \)

So: \( x \geq 2 \)

Any notation is OK: \( x \geq 2 \), \([-2, \infty)\), etc.

2.) (5 pts.) For the function \( g(t) = (t + 1)(t - 2)^2 \), shown below, is \( g(t) \) concave up over the entire interval \([-2, 2]\)? Justify your answer.

No. So far, our definition of \textit{concave up} is "smiley face" (or part of one).

Clearly this graph is more "frowny face" from \(-2\) to \(1\), at least. (Seems to turn to concave up for \( x \in (1, 2) \).)