WARMUP: Change on the Graph

Determine if the statement is TRUE or FALSE.

1. All polynomials are continuous.
2. A critical point is a location where change will occur.
3. A point of inflection will result in a change in concavity.
4. Concavity represents how the slope of a function is changing.
5. A change in concavity must occur at a point of inflection.
6. The local minimum is the minimum height of the function.
7. The local maximum represents a change in the slope of a function from increasing to decreasing.
8. Local extrema are the result of a change in slope on a graph.
9. Critical points on the second derivative are potential points of inflection.
10. Critical points on the first derivative of a polynomial represent where a horizontal tangent exists.
11. The maximum height on a graph can be the local maximum.
12. A vertical asymptote will always result in a critical point.
13. When the first derivative equals zero, it results in local extrema.
14. Relative minimum is another name for the local minimum.

WARMUP: Change on the Graph

Determine if the statement is TRUE or FALSE.

1. All polynomials are continuous. **TRUE**
2. A critical point is a location where change will occur. **FALSE**
3. A point of inflection will result in a change in concavity. **TRUE**
4. Concavity represents how the slope of a function is changing. **TRUE**
5. A change in concavity must occur at a point of inflection. **FALSE**
6. The local minimum is the minimum height of the function. **FALSE**
7. The local maximum represents a change in the slope of a function from increasing to decreasing. **TRUE**
8. Local extrema are the result of a change in slope on a graph. **FALSE**
9. Critical points on the second derivative are potential points of inflection. **TRUE**
10. Critical points on the first derivative of a polynomial represent where a horizontal tangent exists. **TRUE**
11. The maximum height on a graph can be the local maximum. **TRUE**
12. A vertical asymptote will always result in a critical point. **TRUE**
13. When the first derivative equals zero, it results in local extrema. **FALSE**
14. Relative minimum is another name for the local minimum. **TRUE**