

Sec 5.6 Rates of Change in Rational Functions

The rates of change calculations in rational functions are the same formulas as for previous sections.

ARC = slope of the secant line between 2 points

IRC = slope of tangent line at single point

So... this unit we will concentrate on understanding the effects of asymptotes and deeper understanding of usefulness and meaning!

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Answer the following questions about this function:



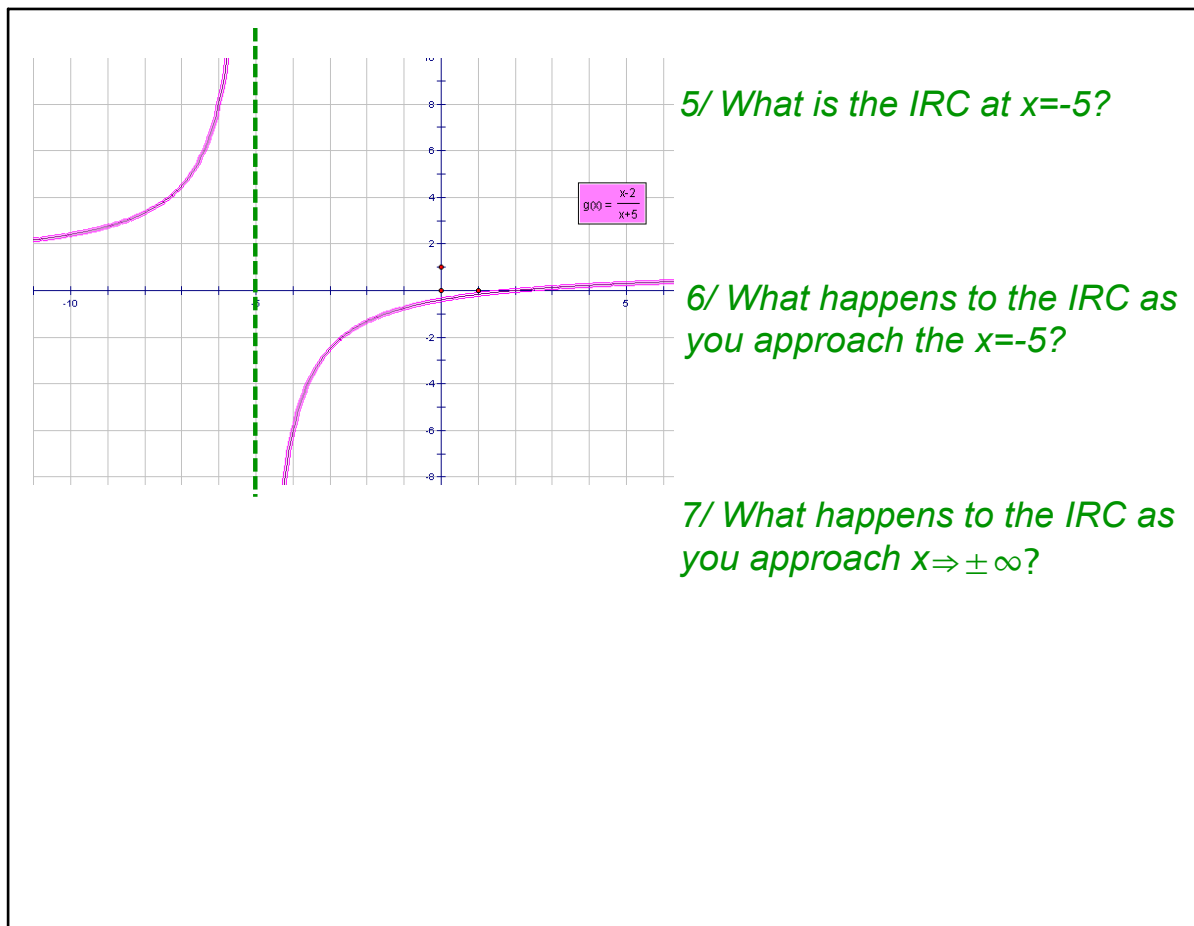
1/ When is it increasing?

2/ When is it decreasing?

3/ When is it positive?

4/ When is it negative?

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Summary

- IRC is undefined at a VA.
- IRC at points that approach a VA become very large positive or very large negative values.
- IRC near a HA approach zero.

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Application for IRC

-An IRC for a revenue function is called the marginal revenue. It represents the estimated additional revenue from selling one more item.

-The IRC represents the rate of change at any specific point in time for a function

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Homework

p303 #4, 5ac, 6ac, 7, 9

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