

Calculus AB

1-5
Infinite Limits

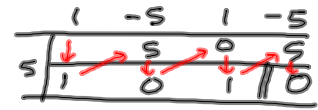
Find the vertical asymptotes (if any) of the function. (pg 85)

$$25) f(x) = \frac{x^2 - 2x - 15}{x^3 - 5x^2 + x - 5}$$

$$\frac{(x-5)(x+3)}{(x-5)(x^2+1)}$$

maybe
 $x=5$

no asymptote,
hole at 5

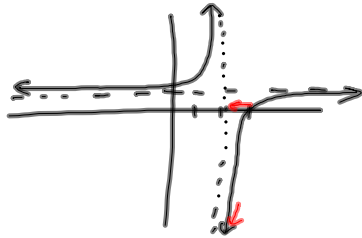


$x^2 + 1 = 0$
can't happen

$$x^2 = -1$$
$$x = \pm \sqrt{-1}$$
$$\pm i$$

Find the limit.

$$33) \lim_{x \rightarrow 2} \frac{x-3}{x-2} = -\infty$$



88
1-8 all
13-53 odd
66-68 all

pg 85
~~1-4 all~~
~~6-48 even~~
~~58-62 all~~