

Limits Cont

Re-write method (RM)

$$\lim_{x \rightarrow 2} \frac{x^2 - 4}{x - 2} = \frac{(x+2)(\cancel{x-2})}{\cancel{x-2}} = x+2 = 2+2 = 4$$

PIM

Trig Review

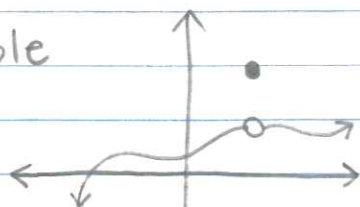
Sin \rightarrow Csc

Cos \rightarrow Sec

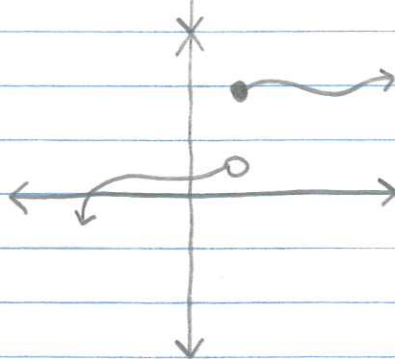
Tan \rightarrow Cot

Discontinuous Functions

Removable



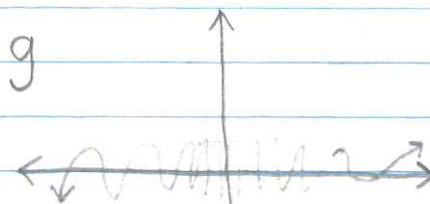
Jump



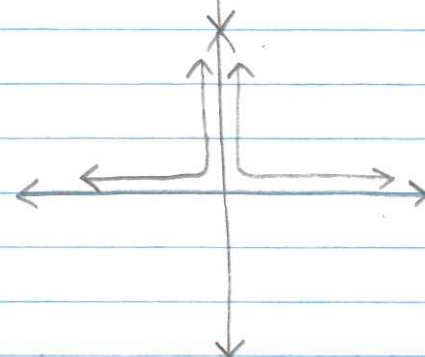
Discontinuous Functions Cont

1/12/15

Oscillating



Infinite



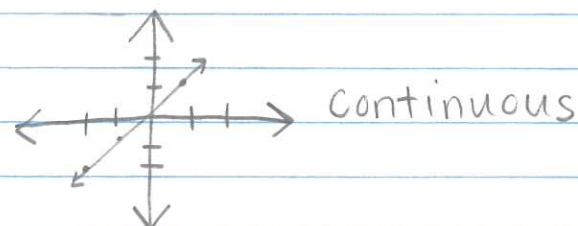
Limits can go through/inside functions

$$\lim_{x \rightarrow 5} \ln(3x^2 - 4) = \ln(\lim_{x \rightarrow 5} 3x^2 - 4)$$

Continuous pieces make continuous functions

$$f(x) = x$$

x	f(x)
-2	-2
-1	-1
1	1



$$f(x) = 3x$$

x	f(x)
-2	-6

