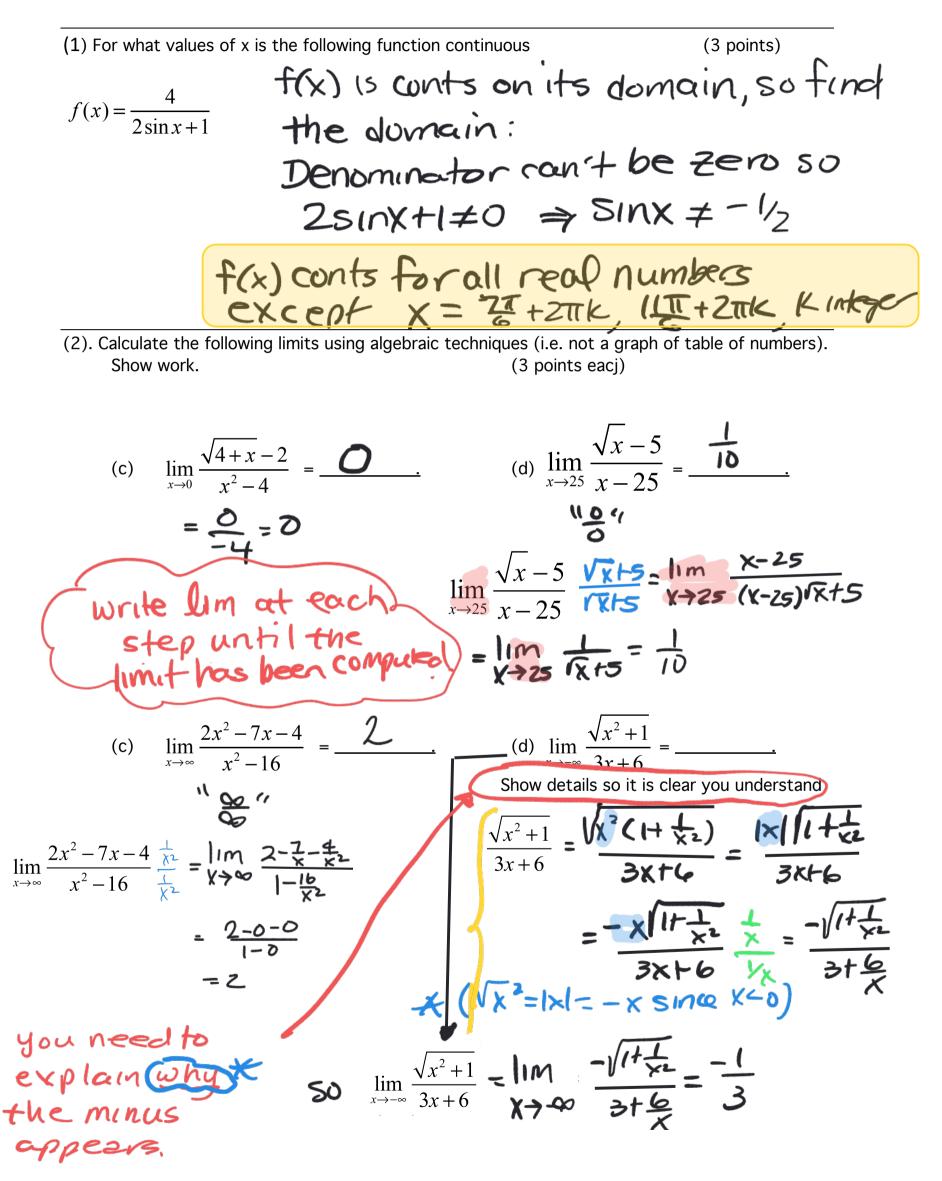
5A Quiz 3 : 1.6, 3.4 1.8



(3) Given
$$f(x) = \begin{cases} x+2c & \text{if } x > 4 \\ cx^2 & \text{if } x \le 4 \end{cases}$$
 find the value of c so that $\lim_{x \to 4} f(x)$ exists. Explain.
(3 points)
(4) Write out the formal definition of $\lim_{x \to \infty} f(x) = -\infty$
(4) Write out the formal definition of $\lim_{x \to \infty} f(x) = -\infty$
(5) C = 2/7
(2 points)
(2 points)

If for every M>0 there exist an N>0 such
that if
$$X > N$$
 then $f(x) < -M$, we say
 $\lim_{X \to \infty} f(x) = -\infty$