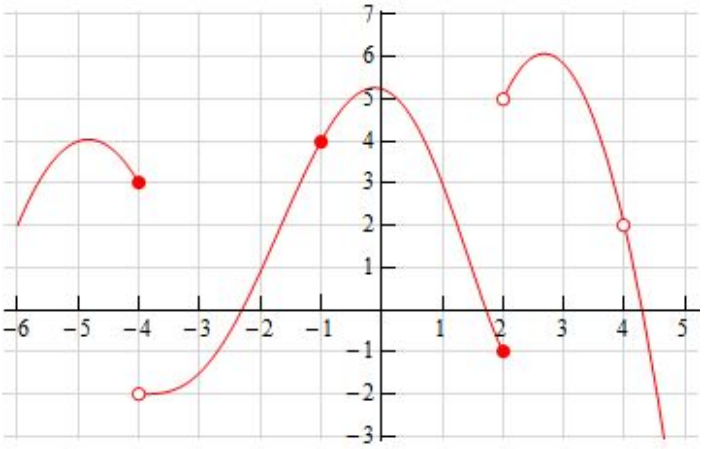
Quiz 1- Graphical Method and Continuity

1.) Use the graph of the function f(x) to evaluate the following.



a.) $\lim_{x\to -4^-} f(x) =$

b.) $\lim_{x\to -4^+} f(x) =$

c.) $\lim_{x\to -4} f(x) =$

d.) *f(-4)=*

e.) $\lim_{x\to -1} f(x) =$

f.) $\lim_{x\to 2^-} f(x) =$

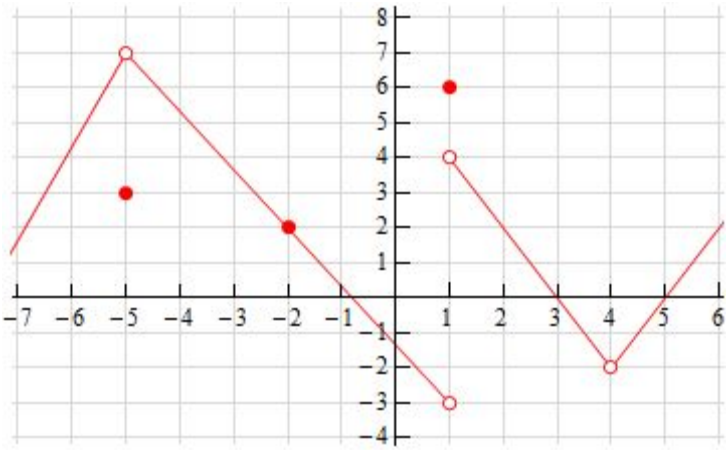
g.) $\lim_{x\to 2^+} f(x) =$

h.) $\lim_{x\to 2} f(x) =$

i.) *f(2)=*

j.) $\lim_{x\to 4} f(x) =$

2.) Use the graph of the function g(x) to evaluate the following.



a.) $\lim_{x\to -5^-} g(x) =$

b.) $\lim_{x\to -5^+} g(x) =$

c.) $\lim_{x\to -5} g(x) =$

d.) *f(-5)=*

e.) $\lim_{x\to -2} g(x) =$

f.) $\lim_{x\to 1^-} g(x) =$

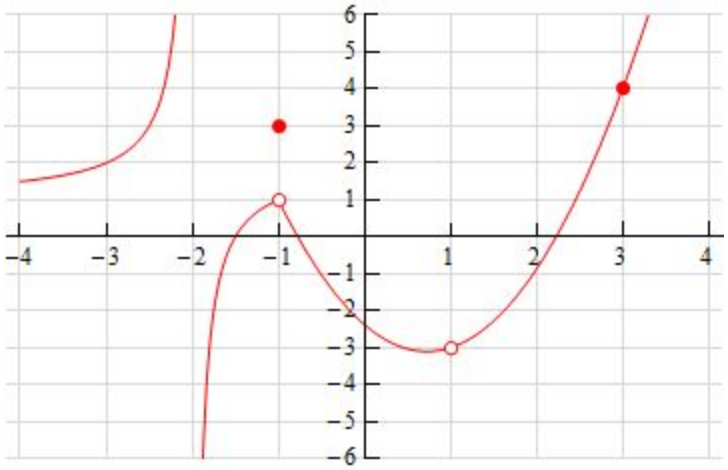
g.) $\lim_{x\to 1^+} g(x) =$

h.) *f(1)=*

i.) $\lim_{x\to 4} g(x) =$

j.) *f(4)=*

3.) Use the graph of the function h(x) to evaluate the following.



a.) $\lim_{x\to -2^-} h(x) =$

b.) $\lim_{x\to -2^+} h(x) =$

c.) $\lim_{x\to -2} h(x) =$

d.) *h(-1)=*

e.) $\lim_{x\to -1} h(x) =$

f.) $\lim_{x\to 1} h(x) =$

g.) $\lim_{x\to 3^-} h(x) =$

h.) $\lim_{x\to 3} h(x) =$

i.) *h(3)=*

j.) *h(1)=*

Quiz 2- Plug and Chug Limits

1.) $\lim_{x\to -1} \frac{(x-3)(x-2)^2}{(x+7)}$

2.) $\lim_{x\to 3} \frac{3x^2-15}{2-x}$

3.) $\lim_{x\to 4} \frac{x-3}{x^2+4x-22}$

4.) $\lim_{x\to -2} \frac{x^4-2x^3+x^2-3}{x+4}$

5.) $\lim_{x\to 0} \frac{cos(x)+sin(x)}{sin(\frac{3\pi}{2}+x)}$

6.) $\lim_{x\to 3} \frac{\sqrt{9x}\cdot\sqrt{x}}{\sqrt{27x}}$

7.) $\lim_{x\to 3} \frac{\frac{1}{x}+\frac{2}{x+1}}{3x}$

8.) $\lim_{x\to 1} \frac{\ln(x)+3}{x}$

9.) $\lim_{x\to \pi} \frac{sin(\frac{3x}{2})+cos(x)}{tan(\frac{x}{4})}$

Quiz 3- End Behavior

1.) $\lim_{x\to\infty} \frac{3x^2+x-15}{2x^2}$

2.) $\lim_{x\to-\infty} \frac{1-x}{10x+7}$

3.) $\lim_{x\to-\infty} \frac{x}{3-5x^2+x^3}$

4.) $\lim_{x\to-\infty} \frac{3-4x^3}{7x^3+\frac{1}{5x^2}-x^2}$

5.) $\lim_{x\to-\infty} \frac{1-3x^2+x^3}{x-13}$

6.) $\lim_{x\to-\infty} \frac{x^5-1}{x^2-x+13}$

7.) $\lim_{x\to\infty} \frac{\frac{2}{3x}-5}{\frac{3}{4x^2}+\frac{4}{7x^3}-\frac{1}{8x^6}}$

8.) $\lim_{x\to-\infty} \frac{\frac{2}{3x^2}-\frac{5}{x^3}}{\frac{1}{4x^2}-\frac{3}{8x^5}}$

Quiz 4- Constant Over Zero

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

2.) $\lim_{x\to 3} \frac{x^3-2x^2-1}{x^2-9}$

3.) $\lim_{x\to -2} \frac{(x-3)(x-1)}{x(x+2)}$

4.) $\lim_{x\to 0^-} \frac{x^4-x+2}{(x-3)(x-1)}$

5.) $\lim_{x\to 9} \frac{x^2-5x+6}{x^2-7x-18}$

6.) $\lim_{x\to 2} \frac{4x^2-3x+7}{x^2-4}$

7.) $\lim_{x\to 1} \frac{x^3-4x^2+2x-7}{1-x}$

8.) $\lim_{x\to 4} \frac{x}{x^2-2x-8}$

Quiz 5- Indeterminate Forms

1.) $\lim_{x \to 6} \frac{x^2 - 8x + 12}{x - 6}$

2.) $\lim_{x \to 1} \frac{2x^2 + 3x - 5}{x^2 - 1}$

3.) $\lim_{x \to 0} \frac{\frac{x}{(x-3)} - \frac{x}{(x+1)}}{x}$

4.) $\lim_{x \to 4} \frac{\sqrt{2x+1} - 3}{\sqrt{x} - 2}$

5.) $\lim_{x \to e} \frac{x^{40} - 4}{x^{20} - 2}$

6.) $\lim_{x \to 1} \frac{\frac{1-x}{x} + \frac{x-1}{x}}{x - 1}$

7.) $\lim_{x \to 0} \frac{sin(x)}{x}$