AP Calculus
Chapter 1 Review

1. Answer each of the following questions for $g(x)=\dfrac{\cos x}{3x^2-5x}$. ***(calculator allowed)***

a) $\lim\limits_{x\to 0^+} g(x)=$

b) $\lim\limits_{x\to 0^-} g(x)=$

c) $\lim\limits_{x\to 0} g(x)=$

d) $g(0)=$

e) $\lim\limits_{x\to \pi} g(x)=$

2. Evaluate each of the following limits. Do not use a calculator.

a) $\lim\limits_{x\to 3}\dfrac{3x^2-8x-3}{x-3}=$

b) $\lim\limits_{x\to 3}\dfrac{x-3}{3x^2-8x-3}=$

c) $\lim\limits_{x\to 2^+}\dfrac{5}{x-2}=$

d) $\lim\limits_{x\to 3/4^-}\dfrac{-7}{3-4x}=$

3. Use the graph to answer each question.

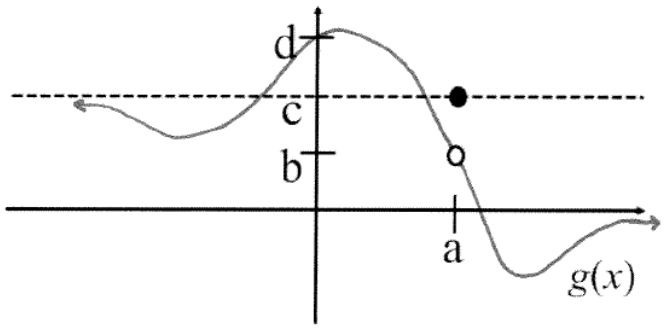
a) $\lim\limits_{x\to\infty} g(x)=$

b) $\lim\limits_{x\to-\infty} g(x)=$

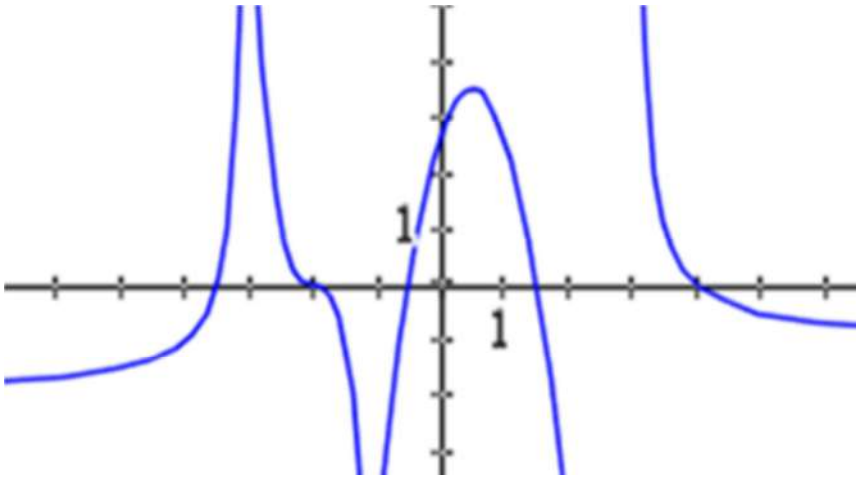
c) $\lim\limits_{x\to a^+} g(x)=$

d) $\lim\limits_{x\to a^-} g(x)=$

e) $g(a)=$



4. Use the graph of $g(x)$ to answer each question.



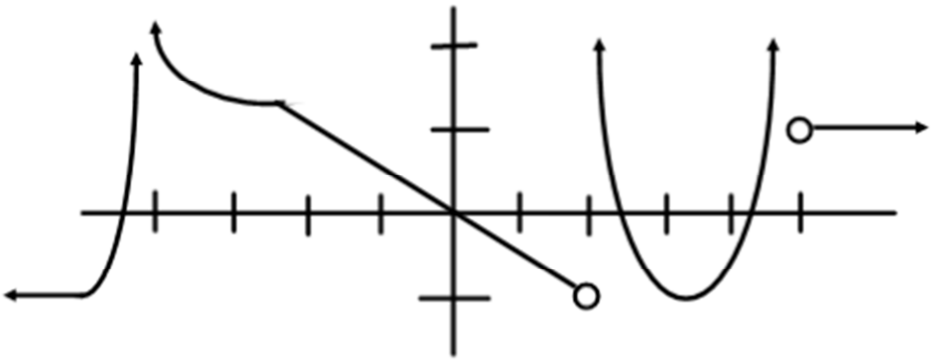
a) $\lim_{x\to\infty} g(x) =$ b) $\lim_{x\to-\infty} g(x) =$ c) $\lim_{x\to-3^+} g(x) =$ d) $\lim_{x\to-3^-} g(x) =$

e) $\lim_{x\to-3} g(x) =$ f) $\lim_{x\to-1^+} g(x) =$ g) $\lim_{x\to-1} g(x) =$ h) $\lim_{x\to-1} g(x) =$

i) $\lim_{x\to2^+} g(x) =$ j) $\lim_{x\to3} g(x) =$ k) $g(-3) =$ l) $g(-2) =$

m) $g(0) =$ n) $\lim_{x\to0} g(x) =$

5. Use the graph of $h(x)$ to answer each question.



a) $\lim_{x\to\infty} h(x) =$ b) $\lim_{x\to-\infty} h(x) =$ c) $\lim_{x\to-4^+} h(x) =$ d) $\lim_{x\to-4^-} h(x) =$

e) $\lim_{x\to-4} g(x) =$ f) $\lim_{x\to2^+} h(x) =$ g) $\lim_{x\to2^-} h(x) =$ h) $\lim_{x\to2} h(x) =$

i) $\lim_{x\to3} h(x) =$ j) $\lim_{x\to4} h(x) =$ k) $h(-4) =$ l) $h(2) =$

m) $h(0) =$ n) $\lim_{x\to0} h(x) =$