

King Fahd University of Petroleum and Minerals
Faculty of Science, Department of mathematical Sciences
Math 101 - Term 043
Quiz #1 (2.1- 2.3) A

Name: _____ Sr. #: _____ ID: _____ Sec.: 03

Question1

Find the following limits if they exist, if not, when possible state whether the limit approaches $+\infty$ or $-\infty$

1) $\lim_{x \rightarrow 3^+} \frac{\sqrt{(x-3)^2}}{3-x}$

2) $\lim_{x \rightarrow -2^+} \frac{1}{x^2 - 4}$

3) $\lim_{h \rightarrow 0} \frac{\frac{1}{3+h} - \frac{1}{3}}{h}$

4) $\lim_{x \rightarrow -\infty} \frac{1-2x}{\sqrt{x^2+1}}$

King Fahd University of Petroleum and Minerals
Faculty of Science, Department of mathematical Sciences
Math 101 - Term 043
Quiz #1 (2.1- 2.3) A

Name: _____ Sr. #: _____ ID: _____ Sec.: 03

Question1

Find the following limits if they exist, if not, when possible state whether the limit approaches $+\infty$ or $-\infty$

1) $\lim_{x \rightarrow 3^-} \frac{\sqrt{(x-3)^2}}{3-x}$

2) $\lim_{x \rightarrow -2^-} \frac{1}{x^2 - 4}$

3) $\lim_{h \rightarrow 0} \frac{\frac{1}{2+h} - \frac{1}{2}}{h}$

4) $\lim_{x \rightarrow \infty} \frac{1-2x}{\sqrt{x^2+1}}$

King Fahd University of Petroleum and Minerals
Faculty of Science, Department of mathematical Sciences
Math 101 - Term 043
Quiz #1 (2.1- 2.3) A

Name:

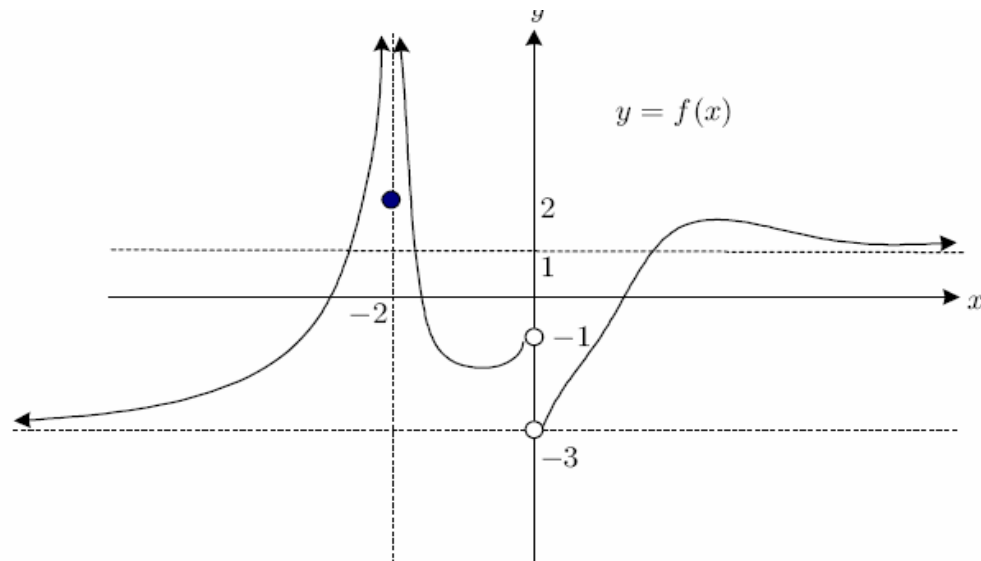
Sr. #:

ID:

Sec.: 05

Question1(5pts)

For the function f whose graph is given below, state the value of the given quantity, if it exists



a) $\lim_{x \rightarrow 0^+} f(x)$

b) $\lim_{x \rightarrow 0} f(x)$

c) $\lim_{x \rightarrow -\infty} f(x)$

d) $\lim_{x \rightarrow +\infty} f(x)$

e) $\lim_{x \rightarrow 2} f(x)$

Question2 (5pts)

Find the following limits if they exist, if not, when possible state whether the limit approaches $+\infty$ or $-\infty$

$$a) \lim_{x \rightarrow 0^-} \frac{|x| - x}{x}$$

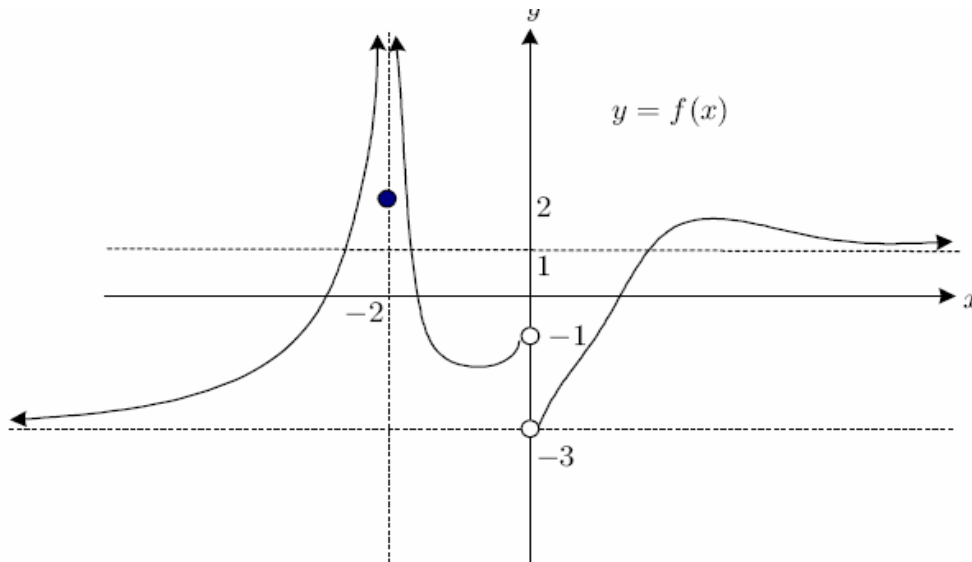
$$b) \lim_{x \rightarrow +\infty} \sqrt{\frac{8x^3 - x + 1}{(x + 4)(2x^2 + 1)}}$$

King Fahd University of Petroleum and Minerals
Faculty of Science, Department of mathematical Sciences
Math 101 - Term 043
Quiz #1 (2.1- 2.3) B

Name: _____ Sr. #: _____ ID: _____ Sec.: 05

Question1(5pts)

For the function f whose graph is given below, state the value of the given quantity, if it exists



a) $\lim_{x \rightarrow 0^-} f(x)$

b) $\lim_{x \rightarrow 0} f(x)$

c) $\lim_{x \rightarrow 2} f(x)$

d) $\lim_{x \rightarrow -\infty} f(x)$

e) $\lim_{x \rightarrow +\infty} f(x)$

Question2 (5pts)

Find the following limits if they exist, if not, when possible state whether the limit approaches $+\infty$ or $-\infty$

$$a) \lim_{x \rightarrow 0^+} \frac{|x|}{\sqrt{x}}$$

$$b) \lim_{x \rightarrow -\infty} \sqrt{\frac{8x^3 - 3x + 4}{(x+4)(2x^2 + 1)}}$$