King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 132, Sections 1, 4 (102)
Quiz 3(a)

Time: 20 minutes Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. For $f(x) = \dfrac{2 - x^3}{x^2 + x}$, find vertical, horizontal and oblique asymptotes, if they exist.

2. Find points of relative maximum and relative minimum for $f(x) = -x^5 - 5x^4 + 200$.

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Math 132, Sections 1, 4 (102)
Quiz 3(b)

Time: 20 minutes Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

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1. For $f(x) = 3x^3 - 18x$, find relative maximum, relative minimum and inflection point(s).

2. Use an extrema test to find two positive numbers with minimum sum and product equal to 144.

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Quiz 3(c)

Time: 20 minutes Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. Find all asymptotes of the function $f(x) = \dfrac{7-x}{x^2-5x-14}$.

2. The demand equation is $p = 42 - 4q$ and average-cost function is $\overline{C} = 2 + \dfrac{80}{q}$. Find the profit maximizing price.