| | King Fahd University of Petroleum and Minerals | | | | |
|----------|--|------------------|-----------------|--|--|
| Math 101 | Quiz # 2(a) | Time: 20 minutes | Date: 4-11-2014 | | |
| | ID " | a | | | |

| King Fand University of Petroleum and Minerals |
|--|
|--|

| Name | ID # | Sr # | Sec. 09 | Marks: |
|-------------------------|------------------------|------------------------|-----------------------------|--------------|
| O1. Use limits to diffe | erentiate the function | $v = 1 + \sqrt{1 + 1}$ | \overline{x} and find the | slope of the |

 $= 1 + \sqrt{2}$ у ጉ tangent line at x = 2.

Q 2. Find the derivatives of all orders of the function $y = (x - 1)(x^2 + 3x - 2)$.

King Fahd University of Petroleum and Minerals

| Math 101 Qu | uiz # 2(b) | Time: 20 minut | tes Date: | 4-11-2014 |
|-------------|------------|----------------|-----------|-----------|
| Name | ID # | Sr # | Sec. 09 | Marks: |

Q1. Use limits to differentiate the function $y = \frac{x+3}{1-x}$ and find the slope of the tangent line at x = -2.

Q 2. Find all points (x, y) on the graph of $y = \frac{x}{x-2}$ with tangent lines perpendicular to the line y = 2x + 3.

| Math 101 | Quiz # 2(c) | Time: 20 minute | es Dat | te: 4-11-2014 | |
|--------------|---------------------|--------------------|------------|-----------------|--|
| Name | ID # | Sr # | Sec. 21 | Marks: | |
| O1 Use limit | to differentiate th | a function $u = 1$ | and find t | ha alama of the | |

King Fahd University of Petroleum and Minerals

Q1. Use limits to differentiate the function $y = \frac{1}{2+x}$ and find the slope of the tangent line at x = 3.

Q 2. Find all points (x, y) on the graph of $y = 3x^2 - 4x$ with tangent lines parallel to the line y = 8x + 5.

| | 8 | J | | |
|-----------------------|-------------------|------------------------------|--------------|--------------|
| Math 101 | Quiz # 2(d) | Time: 20 minu | ite Date: | 4-11-2014 |
| Name | ID # | Sr # | Sec. 21 | Marks: |
| Q1. Use limits to | differentiate the | function $y = \frac{1}{2+x}$ | and find the | slope of the |
| tangent line at $x =$ | 3. | | | |

King Fahd University of Petroleum and Minerals

Q 2. Find the derivatives of all orders of the function $y = (x - 1)(x^2 + x - 1)$.