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| C:\Users\Ayham\Desktop\Untitled-1.jpg | **Saudi Electronic University** |
| **Final Examination (Alternative)**Date: 25.05.2014 | **Fundamentals of Mathematics****MATH 001** |
| **Student Name (ARABIC):****Student ID:****Instructor Name: CRN :****Instructions:**This exam duration is **2 hours.** This is NOT an open book exam.The use of calculators is permitted. The use of mobile phones is NOT permitted. Please answer all the **5** questions.The number of pages is **8 pages** including this page.**Marking Scheme:**

|  |  |  |
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| **Question** | **Score** |  |
| 1 | (30 Marks) |  |
| 2 | (4 Marks) |  |
| 3 | (6 Marks) |  |
| 4 | (6 Marks) |  |
| 5 | (4 Marks) |  | **Signature** |
| **TOTAL** |  |  |

 |
| **Question 1:** (30 points) Choose the correct answer, write your answer in the table below: |
| 1. The degree of the polynomial  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. " Twice a number increased by five " is translated to:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The $x-$ **intercept** for the line is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The simplification of  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The equation of the line whose slope is $-\frac{7}{11}$$4$and containing the point is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The solution set for the equation  is :
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The first coordinate is always negative in quadrants:
 |
| 1. I and II
 | 1. II and III
 | 1. I and IV
 | 1. III and IV
 |
| 1. The simplification of  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The set of numbers for which the rational expression $\frac{x}{x+1}$  is not defined is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The result of $2^{4}∙2^{3}$ is **:**
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The factorization of  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The Greatest Common Factor (*GCF*) of  and  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The domain of the function  is:
 |
| 1.
 | 1.
 |
| 1.
 | 1.
 |
| 1. The interval notation for the set$ $ is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The result of the division  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The result of the multiplication  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. If , then is equal to:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |
| 1. The set is called the set of :
 |
| 1. Integers
 | 1. Whole numbers
 | 1. Natural numbers
 | 1. Rational numbers
 |
|  1. The simplification of  is:
 |
| 1.
 | 1.
 | 1.
 | 1.
 |

|  |
| --- |
| 1. The equation illustrated by this graph is:

 |
| 1.
 | 1.
 | 1.
 | 1.
 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Answer |  |  |  |  |  |  |  |  |  |  |
| Question | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Answer |  |  |  |  |  |  |  |  |  |  |

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| **Question 2:** ( 4 points)  |

Perform and simplify the following:

1. 
2. 

|  |
| --- |
| **Question 3:** (6 points)  |

Solve the following equations:

1. 
2. 

|  |
| --- |
| **Question 4:** (6 points) Solve the following inequalities: |

1. 
2. 

|  |
| --- |
| **Question 5:** (4 points) |

Solve the system 