Name: ....
ID: ....
Group: ....
Subject: ....
Date: Tuesday 19 / 03 / 20 13
Mid-Term Exam (Second Term)

الجامعة السعودية الالكترونية
Saudi Electronic University
2011   1432

Question I / Choose the correct answers and write them in the table below

(1 point for each)

1/ $\quad -\left|-\dfrac{3}{7}\right| =$

    a) $-\dfrac{7}{3}$ b) $\dfrac{7}{3}$ c) $-\dfrac{3}{7}$ d) $\dfrac{3}{7}$

2/   The reciprocal of $-\dfrac{5}{11}$ is:

    a) $\dfrac{11}{5}$ b) $-\dfrac{11}{5}$ c) $-\dfrac{5}{11}$ d) $\dfrac{5}{11}$

3/   4.5 is 25% of what number?

    a) 25   b) 18   c) 112   d) 5

4/   x= 3 is solution of

    a) $2x+1=7$ b) $2x-1 = 7$ c) $x+5=9$ d) $x-5 = 9$

5/   An ordered pair solution of the equation $5x - y = 3$ is:

    a) $(0,3)$ b) $(0,-3)$ c) $(-3,0)$ d) $(3,0)$

6/   The point $(-6,-3)$ is located in the quadrant:

    a) III   b) I   c) IV   d) II

7/   The value of $a^2 - 3$, when $a = -4$ is:

    a) -19 b) 13   c) 19   d) -13

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8/ $y^3 \cdot y^5 =$

    a) y^{15} b) y^2 c) y^8 d) y^{-2}

9/ The GCF of ($3x^3$, $15x^5$, $12x^2$) is:

    a) $3x^3$ b) $3x$ c) $3x^2$ d) $5x^2$

10/ Which of the following expressions is a difference of squares:

    a) $x^2 + 16$ b) $x^2 - 100$ c) $-4x^2 + 10y^2$ d) $9x^2 + 16y^2$

11/ The LCM of ($30x^3$, $10x^5$)

    a) $10x^5$ b) $30x^3$ c) $30x^5$ d) $30x$

12/ The excluded value for which the rational expression ($\frac{2}{3a+12}$) is not defined, is:

    a) 4   b) 9   c) - 4   d) 2

Question	1	2	3	4	5	6	7	8	9	10	11	12
Answer	C	B	B	A	B	A	B	C	C	B	C	C

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Question 2/   **(2 points)**

Collect like terms

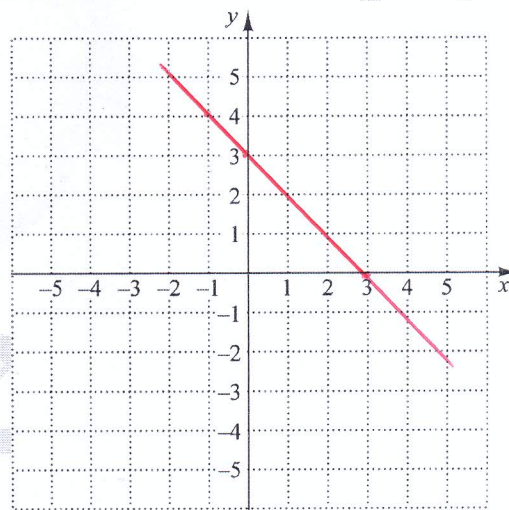$4m^2 - 10m - 5m^2 + 3m$ ......$-m^2 - 7m$......

Find an equivalent expression without parentheses.

$-(-2p + 5q - 8t)$ ......$2p - 5q + 8t$......

Question 3 / Graph the equation $x + y = 3$ and identify the y-intercept   **(2 points)**

X	Y
0	3
3	0
-1	4

Question 4/   **(2 points)**

Convert to scientific notation 0.000000405   ......4.05×10^{-7}......

Convert to standard notation 4.02×10^8 ......402000000......

Question 5 /   **(2 points)**

Factor $2z^3 + 2z^2 + 3z + 3$

$[3 + 1][2z^2 + 3]$

Solve the quadratic equation $x^2 - 8x + 16 = 0$

$(x - 4)(x - 4) = 0$

$\boxed{x = 4}$