The City School

**North Nazimabad Boys Campus**

**Second Monthly Test Session 2019 – 20**

**Class - 9**

**Time: 35 Minutes Add Math Marks 20**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sec: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Q1 (a)** Solve the equation lg(*x* + 12) = 1 + lg(2 – *x*). [3]

**(**b**)** lg(5*x* + 10) + 2 lg3 = 1 + lg(4*x* + 12), [4]

Q2 Given that *p* = 3 + 1 , express in its simplest surd form,

3 – 1

**(i)** *p*, [3]

**(ii)** *p* –

1–*p*

. [2]

Q3 **(i)** Given that

 2*x*–3

82*y*–3 = 16

*x*–*y*

, show that 3*x* + 2*y* = 6. [4]

**(ii)** Given also that 5*y* = 25, find the value of *x* and of *y*. [4]

125*x*