**Last Minute Revision Quiz**

1. Where does the graph of *y = lnx* intercept the x axis?

(1 point)

1. What does mean?

(1 point)

1. Sketch the following graphs with appropriate axes:
2. *sin-1x*
3. *cos-1x*
4. *tan-1x*

(1 point each)

1. What are the double angle trig identities?

(1 point each)

(2 points)

(2 points)

1. Show that there is a solution to the equation between 0.5 and 1.0

(1 point)

1. a) What is a good first step in the process for solving equations such as⏐x2+3x+2⏐ = 3?

(1 point)

b) For what values of *k* do the equations y = ⏐2-x2⏐ and y = k, have 0, 2, 3 and 4 roots?

(3 points)

1. a) Given the composite function gf, how is the range of f related to the function g?

(1 point)

b) In the same composite function gf, what is the range of g restricted by?

(1 point)

c) How is the range of a function g-1 related to the function g?

(1 point)

1. a) For what type of function (*one to one*, *one to many*, *many to one*, *many to many*) can an inverse function be found?

(1 point)

b) How can we change a *one to many* function into a *one to one* function?

(1 point)

c) What is a *self inverse* function?

(3 points)

1. Describe the geometrical transformation of to being careful about the order of transformations applied.

(3 points)

1. For what values of the gradient will an iterative staircase/cobweb method converge?

(1 point)

1. . What is *A* here?

(1 point)

1. Differentiate

(1 point)

1. Given that , find here…

(1 point)

**Last Minute Revision Quiz - Answers**

1. Where does the graph of *y = lnx* intercept the x axis? At .

(1 point)

1. What does mean?

(1 point)

1. Sketch the following graphs with appropriate axes:
2. *sin-1x*
3. *cos-1x*
4. *tan-1x*

(1 point each)

1. What are the double angle trig identities? ,

(1 point each)

1. +c

(2 points)

1. etc.

(2 points)

1. Show that there is a solution to the equation between 0.5 and 1.0

Set equal to zero etc. (1 point)

1. a) What is a good first step in the process for solving equations such as⏐x2+3x+2⏐ = 3?

(1 point)

b) For what values of *k* do the equations y = ⏐2-x2⏐ and y = k, have 0, 2, 3 and 4 roots?

(3 points)

1. a) Given the composite function gf, how is the range of f related to the function g?

The range of f is the domain of g (1 point)

b) In the same composite function gf, what is the range of g restricted by?

(1 point)

c) How is the range of a function g-1 related to the function g?

(1 point)

1. a) For what type of function (*one to one*, *one to many*, *many to one*, *many to many*) can an inverse function be found?

(1 point)

b) How can we change a *one to many* function into a *one to one* function?

Restrict the domain (1 point)

c) What is a *self inverse* function?

A function for which (3 points)

1. Describe the geometrical transformation of to being careful about the order of transformations applied.

Translate (1, 0) then stretch SF ½ or… (3 points)

1. For what values of the gradient will an iterative staircase/cobweb method converge?

When (1 point)

1. . What is *A* here?

(1 point)

1. Differentiate

(1 point)

1. Given that , find here…

(1 point)