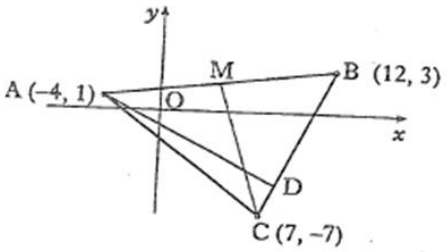
Name:	Date:
Question 1: State a suitable domain, on the set of real numbers, for the following function; $$g(x) = \frac{5}{\sqrt{7x+3}}$$	3·1 Bronze Outcome 1
Question 2: Two functions are defined as; $h(x) = x^2 + 9$ and $k(x) = 2x - 5$. Calculate $h(k(x))$.	3·2 Silver Outcome 2
Question 3: A function is given by $f(x) = 8x - 1$. Find the inverse function $f^{-1}(x)$.	3·3 Outcome 1
Question 4: Find the equation of the straight line which is perpendicular to the line which makes an angle of 60° with the positive direction of the x-axis and which passes through the point $(-1, 9)$.	1·6 Gold Outcome 3
Question 5: Triangle RST has vertices R(-3, 0), S(4, 1) and T(8, 2). Calculate the equation of the altitude from R.	1·8 Silver Outcome 2
My score:	

Exam Questions

Question 1:

A triangle ABC has vertices
A (–4, 1), B (12, 3) and C (7, –7).



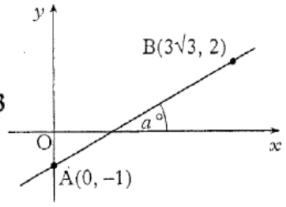
(a) Find the equation of the median CM. (3)

(b) Find the equation of the altitude AD. (3)

(c) Find the coordinates of the point of intersection of CM and AD. (3)

Question 2:

Find the size of the angle $a°$ that the line joining the points A(0, –1) and B($3\sqrt{3}$, 2) makes with the positive direction of the x-axis. **3**



Question 3:

Find the equation of the straight line which is parallel to the line with equation $2x + 3y = 5$ and which passes through the point (2, –1). **3**

My score: