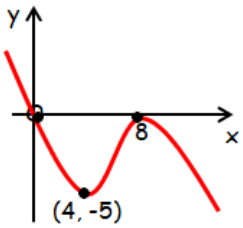
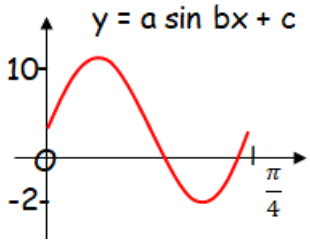
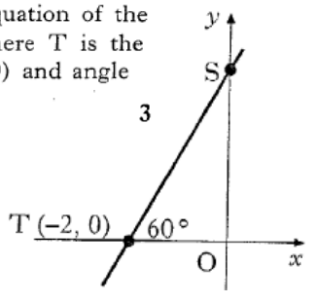
Name:	Date:
Question 1: State a suitable domain, on the set of real numbers, for the following function; $g(x) = \frac{2}{\sqrt{3x+4}}$	3·1 Silver Outcome 2
Question 2: Triangle RST has vertices R(-3, -5), S(4, 1) and T(8, 2). Calculate the equation of the altitude from R.	1·8 Silver Outcome 2
Question 3: This diagram shows the graph of y = f(x).  Sketch the graph of y = f(4x) + 5.	4·1 Gold Outcome 1
Question 4: Change 240° into radians.	5·1 Silver Outcome 2
Question 5: For the graph below, write down the values of a, b and c. 	5·2 Silver Outcome 2
My score:	

Exam Questions

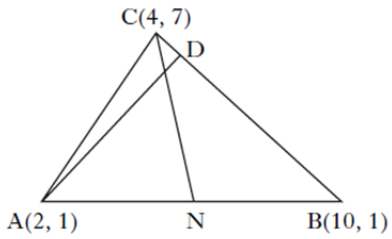
Question 1:

Find the equation of the line ST, where T is the point (–2, 0) and angle STO is 60°. 3



Question 2:

Triangle ABC has coordinates A(2, 1), B(10, 1) and C(4, 7).



(*a*) Find the equation of the median CN. 3

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

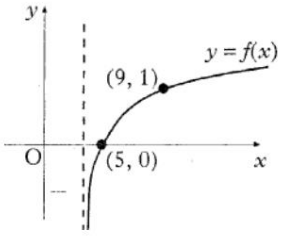
(*c*) The median from (*a*) and the altitude from (*b*) intersect at P. Find the coordinates of P. 3

(*d*) The point Q lies on AB and has coordinates (8, 1).

Show that PQ is parallel to BC. 2

Question 3:

The function f is of the form $f(x) = \log_b (x - a)$.
The graph of $y = f(x)$ is shown in the diagram.



(*a*) Write down the values of a and b. 2

(*b*) State the domain of f. 1

My score: