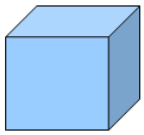
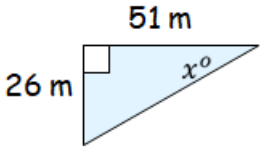
Name:	Date:
1 Find the 'nth' term for the following sequence and hence find the 10th term; 1, 7, 13, ...	MTH 413a Silver Outcome 1
2 Calculate the surface area of this cube.  15 m	MTH 411b Bronze Outcome 1
3 Calculate the size of the angle marked x in the triangle below. 	MTH 416a Silver Outcome 2
4 Picking a heart from a pack of playing cards or getting a score of less than 3 from rolling a dice. Which is more likely? You MUST give a reason for your answer!	MNU 422a Gold Outcome 1
5 There are 150 S3 pupils choosing an expressive art as part of their subject choices. 72 of them are choosing Art, 18 are choosing Drama and the rest are choosing Music. What percentage of S3 pupils are choosing Music?	MNU 407a Silver Outcome 3
My score:	

Exam Questions

Question 1:

MTH 415a Bronze Outcome 2

Solve algebraically the inequality

$$2x + 3 > 10.$$ **2**

Question 2:

MNU 420a Silver Outcome 1

Sean draws a stem and leaf diagram to display charity donations.

Donation (£)

0	3	5	8			
1	0	0	0	2	2	
2	2	4	8			
3	0	5	5	6	8	8
4	0	0	5			

n = 20 4 | 5 represents £45

Using the above diagram, find:

(*a*) the mode; **1**

(*b*) the median; **2**

(*c*) the range of the donations. **1**

Question 3:

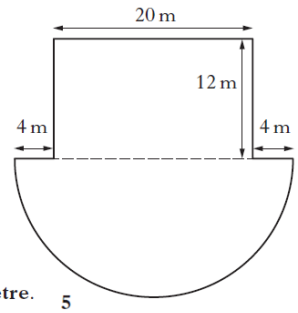
MTH 416b Gold Outcome 2

The floor plan of a concert hall is shown below.

The stage is a rectangle and the seating area is a semi-circle.

Calculate the total area of the stage and seating area.

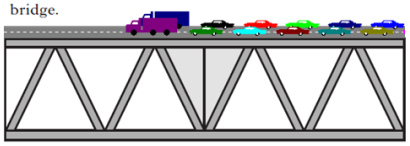
Give your answer correct to the **nearest square metre.** **5**



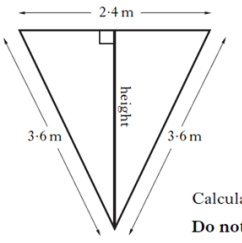
Question 4:

MTH 416a Gold Outcome 1

A steel plate in the shape of an isosceles triangle is used to strengthen a bridge.



The dimensions of the isosceles triangle are shown below.



Calculate the height of the steel plate.

Do not use a scale drawing. **4**

Question 5:

MTH 414a Silver Outcome 1

Multiply out the brackets and simplify

$$5 + 4(2m - 3).$$ **2**

My score: