Name:	Date:
Question 1:  The temperature of a hot tub is 15°C and is set to increase 2% every hour. What will the temperature of the hot tub be after 3 hours? 	APP 1·3a Bronze Outcome 2
Question 2: Express this fraction in it's simplest form. $\frac{2x-8}{x^2-x-12}$	E+F 1·3 Gold Outcome 1
Question 3: Write down the gradient and the y-intercept of the straight line with the following equation; $2y+3x=9$	REL 1·1a Gold Outcome 1
Question 4: Evaluate; $4\frac{8}{9}-1\frac{2}{3}$	APP 1·3b Gold Outcome 1
Question 5:  Solve the following trig equation; $6\cos x° - 5 = 0, \quad 0 \leq x \leq 360°$	REL 1·5b Bronze Outcome 1
My score:	

Exam Questions

Question 1:

E+F 1·2a Silver Outcome 2

Multiply out the brackets and collect like terms.

$(x + 2)(x - 5) - 9x$ **3**

Question 2:

REL 1·1d Gold Outcome 1

(a) A cinema has 300 seats which are either standard or deluxe.

Let x be the number of standard seats and y be the number of deluxe seats.

Write down an algebraic expression to illustrate this information. **1**

(b) A standard seat costs £4 and a deluxe seat costs £6.

When all the seats are sold the ticket sales are £1380.

Write down an algebraic expression to illustrate this information. **2**

(c) How many standard seats and how many deluxe seats are in the cinema? **3**

Question 3:

REL 1·1e Bronze Outcome 2

Change the subject of the formula

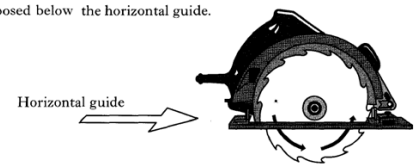
$$A = \frac{1}{2}h(a+b)$$

to h. **2**

Question 4:

REL 1·4a Gold Outcome 1

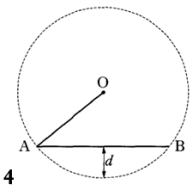
A circular saw can be adjusted to change the depth of blade that is exposed below the horizontal guide.



The circle, centre O, below represents the blade and the line AB represents part of the horizontal guide.

This blade has a radius of 110 millimetres.

If AB has length 140 millimetres, calculate the depth, d millimetres, of saw exposed. **4**



Question 5:

REL 1·3a Gold Outcome 3

Solve the equation

$$2x^2 - 6x - 5 = 0,$$

giving the roots correct to one decimal place. **4**

My score: