Name:	Date:
Question 1: Multiply out the following brackets and collect like terms; $(x+7)(x^2+8x+9)$	E+F 1·2a Bronze Outcome 3
Question 2:  An antique clock is expected to decrease in value by 1·8% p.a. The clock was bought for £900.  How much is it expected to be worth after 3 years?	APP 1·3a Silver Outcome 3
Question 3: Change the subject of the formula to v. $y=\frac{v^2}{z}+3$	REL 1·1e Silver Outcome 2
Question 4: Find the equation of the line joining the points (2, -1) and (4, 5). Give the equation in it's simplest form.	REL 1·1a Silver Outcome 2
Question 5: Solve the following inequality; $\frac{x}{9}+\frac{x}{3}\geq 2$	REL 1·1c Gold Outcome 2
My score:	

Exam Questions

Question 1:


You're on your own!

Evaluate $\frac{3}{4}\left(\frac{1}{3}+\frac{2}{7}\right)$.

Give your answer in its simplest form. 2

Question 2:

REL 1·1d Gold Outcome 1

Aaron saves 50 pence and 20 pence coins in his piggy bank.

Let x be the number of 50 pence coins in his bank.

Let y be the number of 20 pence coins in his bank.

(a) There are 60 coins in his bank.
Write down an equation in x and y to illustrate this information. 1

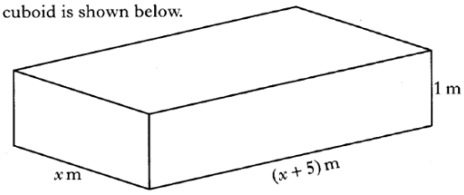
(b) The total value of the coins is £17·40.
Write down another equation in x and y to illustrate this information. 1

(c) Hence find **algebraically** the number of 50 pence coins Aaron has in his piggy bank. 3

Question 3:

REL 1·3a Silver Outcome 2

A cuboid is shown below.



It has length $(x + 5)$ metres, breadth x metres, height 1 metre and volume 24 cubic metres.

(a) Show that $x^2 + 5x - 24 = 0$. 2

(b) Using the equation in part (a), find the breadth of the cuboid. 3

Question 4:


E+F 1·1b Gold Outcome 2

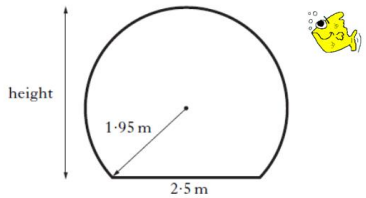
Evaluate $16^{\frac{3}{4}}$. 2

Question 5:

REL 1·4a Gold Outcome 1

Ocean World has an underwater viewing tunnel.

The diagram below shows the cross-section of the tunnel. It consists of part of a circle with a horizontal base.



The radius of the circle is 1·95 metres and the width of the base is 2·5 metres. Calculate the height of the tunnel. 4

My score: