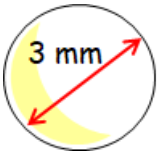
Name:	Date:
Question 1: Calculate the volume of this sphere which has a diameter of 3 millimetres  	E+F 1·4c Silver Outcome 3
Question 2: Express the following fraction with a rational denominator and simplify if required. $\frac{8}{\sqrt{6}}$	E+F 1·1a Silver Outcome 2
Question 3: Find the equation of the line joining the points (5, 3) and (7, 9). Give the equation in it's simplest form.	REL 1·1a Silver Outcome 2
Question 4: Multiply out the following brackets and collect like terms; $(2x-3)(x-10)$	E+F 1·2a Gold Outcome 2
Question 5: Solve the following inequality; $\frac{x+3}{8}+\frac{x-1}{4}\geq 5$	REL 1·1c Gold Outcome 2
My score:	

Exam Questions

Question 1:

APP 1·3a Bronze Outcome 2

A local council recycles 42 000 tonnes of waste a year.

The council aims to increase the amount of waste recycled by 8% each year.

How much waste does it expect to recycle in 3 years time?

Give your answer **to three significant figures.** 4

Question 2:

REL 1·1d Gold Outcome 1

Solve algebraically the system of equations

$$4x + 2y = 13$$

$$5x + 3y = 17.$$ 3

Question 3:

REL 1·1e Bronze Outcome 1

Change the subject of the formula

$$r = 3p + 2t$$

to p. **2**

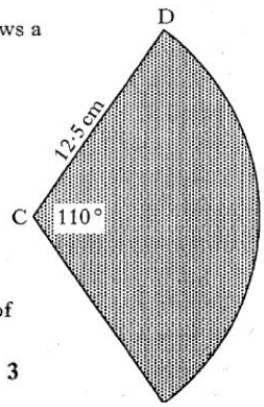
Question 4:

E+F 1·4b Bronze Outcome 2

The diagram shows a sector of a circle, centre C.

The radius of the circle is 12·5 centimetres and angle DCE is 110°.

Calculate the area of the sector CDE. 3



Question 5:

E+F 1·2b Silver Outcome 2

Factorise

$$4p^2 - 49.$$ 2

My score: