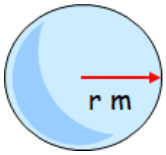
Name:	Date:
Question 1: Evaluate; $3\frac{5}{6}+2\frac{4}{7}$	APP 1·3b Gold Outcome 1
Question 2: Calculate the discriminant and determine the nature of the roots for the following quadratic equation. $x^2+8x+3=0$	REL 1·3b Bronze Outcome 1
Question 3: Simplify the following expression. $\sqrt{48}+\sqrt{12}+\sqrt{3}$	E+F 1·1a Silver Outcome 1
Question 4: Factorise the following expression; d^2+5d-6	E+F 1·2b Silver Outcome 3
Question 5: This sphere has a volume of 5572·45 m³.  Calculate it's radius. 	E+F 1·4c Gold Outcome 3
My score:	

Exam Questions

Question 1:

E+F 1·2a Gold Outcome 3

Multiply out the brackets and collect like terms.

$(x + 5)(2x^2 - 3x - 1)$ **3**

Question 2:

APP 1·4 Silver Outcome 2

A gardener grows tomatoes in his greenhouse.
The temperature of the greenhouse, in degrees Celsius, is recorded every day at noon for one week.

17 22 25 16 21 16 16

(*a*) For the given temperatures, calculate:
(i) the mean;
(ii) the standard deviation. **1**
Show clearly all your working. **3**

For best growth, the mean temperature should be $(20 \pm 5)°C$ and the standard deviation should be less than 5 °C.

(*b*) Are the conditions in the greenhouse likely to result in best growth? **Explain clearly your answer.** **2**

Question 3:

APP 1·3a Gold Outcome 1

Cleano washing powder is on special offer.

Each box on special offer contains 20% more powder than the standard box.

A box on special offer contains 900 grams of powder.

How many grams of powder does the standard box contain? **3**

Question 4:

REL 1·1e Bronze Outcome 2

Change the subject of the formula

$$\frac{x}{c} + a = b$$

to x. **2**

Question 5:

E+F 1·3 Gold Outcome 2

Express $\frac{3}{x} - \frac{5}{x+2}$, $x \neq 0$, $x \neq -2$, as a single fraction in its simplest form. **3**

My score: