| Name: | Date: |
|---|---------------------------|
| Question 1: | E+F 1·2a Silver Outcome 3 |
| Multiply out the following brackets and collect like terms; | |
| $(x-8)(x^2+4x+3)$ | |
| Question 2: | E+F 1·2b Bronze Outcome 3 |
| Factorise the following expression; | |
| $w^2 + 15w + 50$ | |
| Question 3: | E+F 1·2c Bronze Outcome 1 |
| Express $x^2 + 4x - 2$ in the form $(x+p)^2 + q$. | |
| | |
| | |
| | |
| Question 4: | APP 1·3a Bronze Outcome 1 |
| A bag of sugar weighs 624 grams. | |
| This is a 4% increase on the standard bag. | |
| What is the weight of the standard bag? | |
| Question 5: | REL 1·1c Gold Outcome 1 |
| Solve the following equation; | |
| $2x - 1 = \frac{x+3}{4}$ | |
| My score: | |

Exam Questions



Question 1:

E+F 1·2a Gold Outcome 2

Multiply out the brackets and collect like terms.

$$5x + (x-4)(3x+1)$$
 3

Question 2:



E+F 1.2b Silver Outcome 2

Factorise

$$x^2 + 2x - 15$$
.

Question 3:



APP 1.3a Silver Outcome 2

The population of a city is increasing at a steady rate of 2.4% per annum.

The present population is 528 000.

What is the expected population in 4 years time? Give your answer to the nearest thousand.





APP 1.3b Gold Outcome 3

 $3\frac{1}{6} \div 1\frac{2}{3}$. 2 Evaluate

Question 5:



REL 1.1c Gold Outcome 1

The cost of hiring a car depends on the number of days the car is hired and the number of litres of petrol used.

- (a) David hired a car for 3 days and used 50 litres of petrol. The total cost was £88·50.
 - Let x pounds be the cost per day of hiring a car, and y pounds be the
 - Write down an equation in x and y which satisfies the above condition.
- (b) Anne hired the same model of car for 4 days and used 60 litres of petrol. The total cost was £113-00.

(c) Find the cost per day of hiring the car and the cost of one litre of petrol.

Write down a second equation in x and y which satisfies this condition.



My score: