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| Name: | Date: |
| <p>Question 1:</p> <p>Multiply out the following brackets and collect like terms;</p> $(x + 3)(x^2 + 3x + 3)$ |  E+F 1·2a Bronze Outcome 3 |
| <p>Question 2:</p> <p>Solve algebraically the system of equations;</p> $3x + 2y = 16$ $5x - 3y = 14$ |  REL 1:1d Gold Outcome 1 |
| <p>Question 3:</p> <p>Write the following in it's simplest index form.</p> $(6e^4)^2$ |  E+F 1:1b Bronze Outcome 2 |
| <p>Question 4:</p> <p>The roll of a high school was 600 pupils.</p> <p>This number is expected to rise at the rate of 20% for the first year and 8% in the second year.</p> <div style="display: flex; align-items: center; justify-content: center;">   </div> <p>Calculate the roll of the high school after 2 years.</p> |  APP 1:3a Gold Outcome 2 |
| <p>Question 5:</p> <p>Factorise the following expression;</p> $2p^2 + 11p + 14$ |  E+F 1:2b Gold Outcome 3 |
| My score: | |

Exam Questions



Question 1:

Evaluate $\frac{2}{7}(1\frac{3}{4} + \frac{3}{8})$ 2

 You're on your own!

Question 2:

A cylindrical container has a volume of 3260 cubic centimetres.

The radius of the cross section is 6.4 centimetres.

Calculate the height of the cylinder.

3



 E+F 1.4c Gold Outcome 1

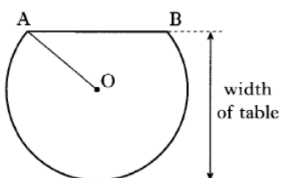
Question 3:

The diagram shows a fold-away table whose top is in the shape of part of a circle.

- The centre of the circle is O.
- AB is a chord of the circle.
- AB is 70 centimetres.
- The radius, OA, is 40 centimetres.

Find the width of the table.

4




 REL 1.4a Gold Outcome 1

Question 4:

Solve, algebraically, the inequation

$$3x < 6(x - 1) - 12. \quad 3$$

 REL 1.1c Silver Outcome 2



Question 5:

Given that

$$f(x) = x^2 + 3,$$

(a) evaluate $f(-4)$ 2

(b) find t when $f(t) = 52$. 2

 REL 1.1b Silver Outcome 1
 REL 1.1b Silver Outcome 2

My score: