
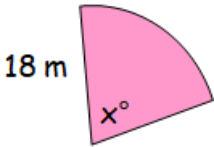


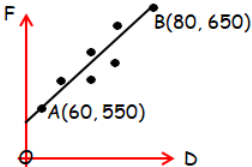





Name:	Date:
<p>Question 1:</p> <p>Solve <b>algebraically</b> the system of equations:</p> $3x + 2y = 14$ $5x - 3y = 17$	 REL 1:1d Gold Outcome 1
<p>Question 2:</p> <p>The area of this sector is <math>243.04 \text{ m}^2</math>.</p>  <p>18 m</p> <p><math>x^\circ</math></p> <p>What is the size of the angle in the centre?</p> 	 E+F 1:4b Gold Outcome 2
<p>Question 3:</p> <p>Calculate the equation of the line of best fit for the following scatter graph.</p>  <p>Give the equation in it's simplest form.</p>	 APP 1:4 Bronze Outcome 3
<p>Question 4:</p> <p>Express <math>x^2 - 6x + 5</math> in the form <math>(x + a)^2 + b</math>.</p>	 E+F 1:2c Bronze Outcome 1
<p>Question 5:</p> <p>Change the subject of the formula to <math>z</math>.</p> $m = n + 4\sqrt{z}$	 REL 1:1e Silver Outcome 2
My score:	

## Exam Questions



Question 1:

 E+F 1·2b Silver Outcome 2

Factorise

$$x^2 - 4y^2. \quad 1$$

Question 2:

 APP 1·3a Bronze Outcome 3

It is estimated that an iceberg weighs 84 000 tonnes.

As the iceberg moves into warmer water, its weight decreases by 25% each day.



What will the iceberg weigh after 3 days in the warmer water?

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


Question 3:

 REL 1·1c Gold Outcome 1

Solve the equation

$$\frac{2}{x} + 1 = 6. \quad 3$$

Question 4:


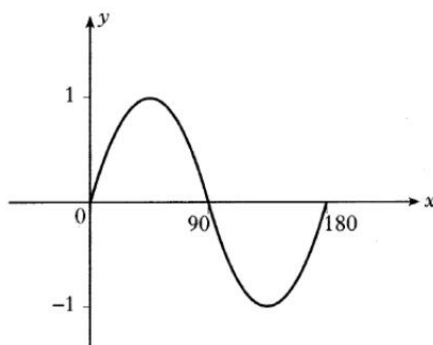
 REL 1·1b Silver Outcome 1

 REL 1·1b Bronze Outcome 2

$$f(x) = 7 - 4x$$

(a) Evaluate  $f(-2)$ . 1(b) Given that  $f(t) = 9$ , find  $t$ . 2

Question 5:

 REL 1·5a Silver Outcome 1
The graph of  $y = \sin bx^\circ$  is shown in the diagram.State the value of  $b$ . 1

My score: