






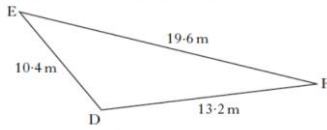
Name:	Date:
Question 1: Multiply out the following brackets and collect like terms; $(5x - 1)(x - 8)$	 E+F 1:2a Gold Outcome 2
Question 2: Solve algebraically the system of equations; $5x + 2y = 33$ $3x + 4y = 17$	 REL 1:1d Gold Outcome 1
Question 3: Write down the value of; 9^0	 E+F 1:1b Silver Outcome 2
Question 5: Write down the gradient and the y-intercept of the straight line with the following equation; $4y - 2x = 10$	 REL 1:1a Gold Outcome 1
Question 5: Change the subject of the formula to p . $r = e\sqrt{p} - b$	 REL 1:1e Silver Outcome 2
My score:	

Exam Questions



Question 1:

Triangle DEF is shown below.



It has sides of length 10.4 metres, 13.2 metres and 19.6 metres.

Calculate the size of angle EDF.

Do not use a scale drawing.

3



E+F 1.2a Bronze Outcome 1

Question 2:

Solve the equation

$$4 \sin x^\circ - 1 = 0, \quad 0 \leq x < 360.$$

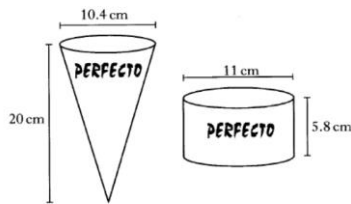
3



REL 1.5b Bronze Outcome 1

Question 3:

Perfecto Ice Cream is sold in cones and cylindrical tubs with measurements as shown below.



Both the cone and the tub of ice cream cost the same.

Which container of ice cream is better value for money?

Give a reason for your answer.

5



E+F 1.4c Silver Outcome 1



E+F 1.4c Silver Outcome 2

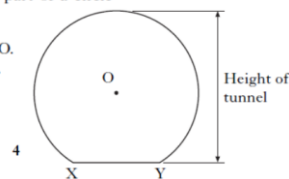
Question 4:

A railway goes through an underground tunnel.

The diagram below shows the cross-section of the tunnel. It consists of part of a circle with a horizontal base.

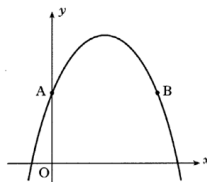
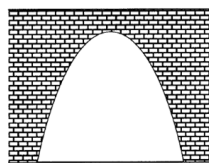
- The centre of the circle is O.
- XY is a chord of the circle.
- XY is 1.8 metres.
- The radius of the circle is 1.7 metres.

Find the height of the tunnel.



REL 1.4a Gold Outcome 1

Question 5:



The arch of a railway bridge is represented by a parabola.

The equation of the parabola is

$$y = 20 - (x - 3)^2.$$

(a) State the coordinates of the maximum turning point of the parabola.

2

(b) State the equation of the axis of symmetry.

1

(c) Points A and B have the same y -coordinate.

A is the point (0, 11). State the coordinates of B.

2



REL 1.2 Silver Outcome 3

My score: