








Name:	Date:
<p>Question 1:</p> <p>A box of tea bags is on special offer and contains 275 tea bags.</p> <p>This is 10% more tea bags than in a standard box.</p> <p>How many tea bags are in a standard box?</p>  	 APP 1·3a Bronze Outcome 1
<p>Question 2:</p> <p>Write the following in it's simplest index form.</p> $\frac{2r^2 \times 5r^4}{10r^6}$	 E+F 1·1b Silver Outcome 1
<p>Question 3:</p> <p>Multiply out the following brackets and collect like terms;</p> $(6x - 5)(x^2 - 2x + 4)$	 E+F 1·2a Gold Outcome 3
<p>Question 4:</p> <p>Solve <b>algebraically</b> the system of equations;</p> $\begin{aligned} 3x + 2y &= 1 \\ 5x - 3y &= 84 \end{aligned}$	 REL 1·1d Gold Outcome 1
<p>Question 5:</p> <p>Find the equation of the line joining the points (2, 3) and (5, -9).</p> <p>Give the equation in it's simplest form.</p>	 REL 1·1a Silver Outcome 2
My score:	

# Exam Questions



## Question 1:

Evaluate  $\frac{3}{8} \times 1\frac{5}{7}$ .

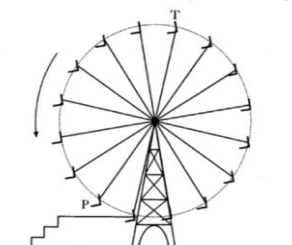
Give your answer in its simplest form. 2



APP 1.3b Gold Outcome 2

## Question 2:

The diagram below shows a big wheel at a fairground.



The wheel has sixteen chairs equally spaced on its circumference.

The radius of the wheel is 9 metres.

As the wheel rotates in an anticlockwise direction, find the distance a chair travels in moving from position T to position P in the diagram. 4



E+F 1.4b Silver Outcome 1

## Question 3:

The diagram below shows the position of three towns.

Lowtown is due west of Midtown.

- Lowtown to Midtown is 75 kilometres.
- Midtown to Hightown is 110 kilometres.
- Hightown to Lowtown is 85 kilometres.



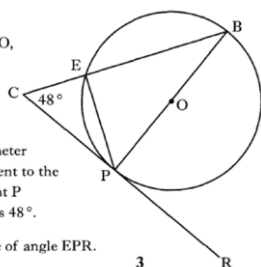
Is Hightown directly north of Lowtown? Justify your answer. 4



REL 1.4a Bronze Outcome 1

## Question 4:

A circle, centre O, is shown below.



In the circle

- PB is a diameter
- CR is a tangent to the circle at point P
- Angle BCP is  $48^\circ$ .

Calculate the size of angle EPR. 3

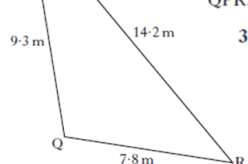


REL 1.4b Gold Outcome 1

## Question 5:

Triangle PQR is shown.

Calculate the size of angle QPR.



APP 1.1 Gold Outcome 3

My score: