








Name:	Date:
<p>Question 1:</p> <p>Multiply the following fractions giving your answer in it's simplest form.</p> $\frac{12}{5v^3} \times \frac{2v}{3}$	 E+F 1·3 Gold Outcome 3
<p>Question 2:</p> <p>Solve <b>algebraically</b> the system of equations;</p> $\begin{aligned} 3x + 2y &= 14 \\ 2x + 3y &= 1 \end{aligned}$	 REL 1·1d Gold Outcome 1
<p>Question 3:</p>  <p>Max put his £60 birthday money into a savings account on his 16<sup>th</sup> birthday.</p> <p>He will receive 0·5% interest p.a.</p> <p>How much will he have in his account on his 21<sup>st</sup> birthday?</p> 	 APP 1·3a Silver Outcome 2
<p>Question 4:</p> <p>Write down the gradient and the y-intercept of the straight line with the following equation;</p> $6y + 8x - 4 = 0$	 REL 1·1a Gold Outcome 1
<p>Question 5:</p> <p>Factorise the following expression;</p> $7u^2 - 24u + 9$	 E+F 1·2b Gold Outcome 3
My score:	

# Exam Questions



## Question 1:

Change the subject of the formula

$$A = 4\pi r^2$$

to  $r$ .

2



REL 1.1e Silver Outcome 2

## Question 2:

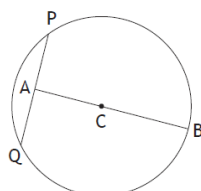
The diagram below shows a circle, centre  $C$ .

The radius of the circle is 15 centimetres.

$A$  is the mid-point of chord  $PQ$ .

The length of  $AB$  is 27 centimetres.

Calculate the length of  $PQ$ .



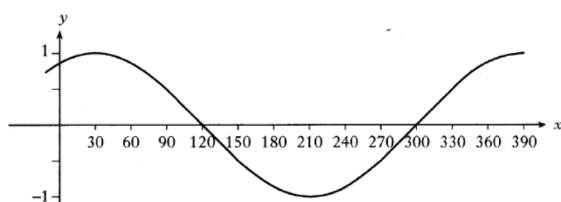
4



REL 1.4a Gold Outcome 1

## Question 3:

The graph shown below has an equation of the form  $y = \cos(x - a)^\circ$ .



Write down the value of  $a$ .

1



REL 1.5a Gold Outcome 1

## Question 4:

Solve the equation

$$4 \cos x^\circ + 3 = 0, \quad 0 \leq x \leq 360.$$

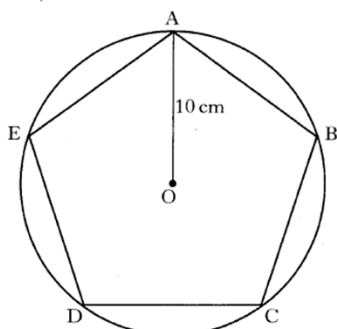
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REL 1.5b Silver Outcome 1

## Question 5:

A regular pentagon  $ABCDE$  is drawn in a circle, centre  $O$ , with radius 10 centimetres.



Calculate the area of the regular pentagon.

5



APP 1.1 Silver Outcome 1

My score: