






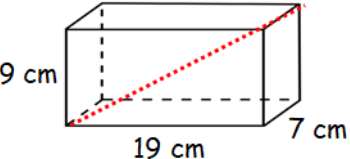




Name:	Date:
<p>Question 1:</p> <p>Write the following in it's simplest index form.</p> $\frac{9y^3 \times 2y^4}{6y^5}$	 E+F 1·1b Silver Outcome 1
<p>Question 2:</p>  <p>A car is bought for £8000 and is expected to decrease by 6·78% p.a.</p> <p>How much is the car expected to be worth after 4 years?</p> 	 APP 1·3a Silver Outcome 3
<p>Question 3:</p> <p>Find the equation of the line joining the points (1, -3) and (3, 9).</p> <p>Give the equation in it's simplest form.</p>	 REL 1·1a Silver Outcome 2
<p>Question 4:</p> <p>Multiply out the following brackets and collect like terms:</p> $(2x - 7)(x^2 + 2x + 5)$	 E+F 1·2a Gold Outcome 3
<p>Question 5:</p>  <p>For this cuboid, calculate the length of the space diagonal.</p> 	 REL 1·4a Silver Outcome 1
My score:	

# Exam Questions




Question 1:

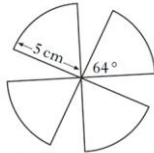
 You're on your own!

Evaluate  $2\frac{1}{3} + \frac{5}{6}$  of  $1\frac{2}{5}$  2

Question 2:

 E+F 1.4b Bronze Outcome 2

A fan has four identical plastic blades.  
Each blade is a sector of a circle of radius 5 centimetres.



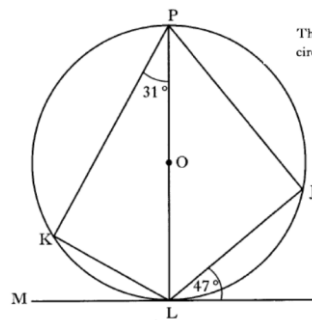
The angle at the centre of each sector is  $64^\circ$ .

Calculate the total area of plastic required to make the blades. 3



Question 3:

 REL 1.4a Silver Outcome 1



The tangent, MN, touches the circle, centre O, at L.  
Angle  $JLN = 47^\circ$ .  
Angle  $KPL = 31^\circ$ .  
Find the size of angle  $KLJ$ .

3


Question 4:

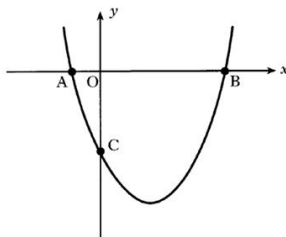
 REL 1.3a Gold Outcome 3

Solve the quadratic equation  
 $3x^2 + 3x - 7 = 0$   
using an appropriate formula.  
Give your answers correct to 1 decimal place. 4



Question 5:

 REL 1.2 Bronze Outcome 3



The equation of the parabola in the above diagram is

$$y = (x - 2)^2 - 9.$$

- (a) State the coordinates of the minimum turning point of the parabola. 2
- (b) Find the coordinates of C. 2
- (c) A is the point  $(-1, 0)$ . State the coordinates of B. 1

My score: