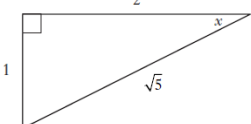
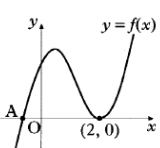


200 Exam Questions & Answers

<p>101 A function f is defined on the set of real numbers by $f(x) = x^3 - x^2 + x + 3$. What is the remainder when $f(x)$ is divided by $(x - 1)$?</p>	
<p>102 If $x^2 - 8x + 7$ is written in the form $(x - p)^2 + q$, what is the value of q?</p>	
<p>103 Given that $\log_{10}x = 3\log_{10}y + \log_{10}2$, express x in terms of y.</p>	
<p>104 Solve the equation $2\cos 3x = 1$, for $0 \leq x \leq 360$</p>	
<p>105 The diagram shows a right-angled triangle with sides and angles marked. Find the value of $\sin 2x$.</p> 	
<p>106 If $s(t) = t^2 - 5t + 8$, what is the rate of change of s with respect to t when $t = 3$?</p>	
<p>107 The diagram shows part of the graph of the curve $y = 2x^3 - 7x^2 + 4x + 4$. Find the x-coordinate of the maximum turning point.</p> 	
<p>108 Find $\int x(3x + 2)dx$.</p>	
<p>109 Find $f(x)$ given that $f'(x) = 2 - \frac{1}{x^2}$ and $f(1) = 8$.</p>	
<p>110 Write $1.5\cos x^\circ + 2\sin x^\circ$ in the form $k\cos(x + a)^\circ$, where $0 \leq a \leq 180$.</p>	