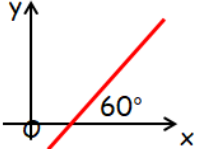







Name:	Date:
<p>Question 1:</p> <p>Calculate the gradient of this line WITHOUT a calculator!</p> 	 1·3 Bronze Outcome 1
<p>Question 2:</p> <p>Calculate the length of the line joining the points <math>(-1, -5)</math> and <math>(11, 0)</math>.</p>	 1·4 Outcome 1
<p>Question 3:</p> <p>Find the equation of the straight line which is perpendicular to the line with equation <math>x + 2y = 8</math> and which passes through the point <math>(-3, 6)</math>.</p>	 1·6 Silver Outcome 2
<p>Question 4:</p> <p>Prove that the points <math>A(-6, -5)</math>, <math>B(0, -2)</math> and <math>C(18, 7)</math> are collinear.</p>	 1·7 Outcome 1
<p>Question 5:</p> <p>Triangle DEF has vertices <math>D(-5, 4)</math>, <math>E(3, 6)</math> and <math>F(5, -1)</math>.</p> <p>Calculate the equation of the perpendicular bisector DE.</p>	 1·8 Gold Outcome 3
My score:	

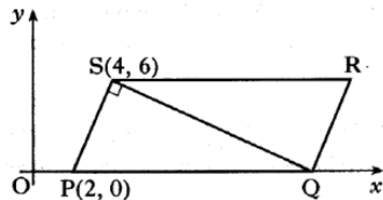
# Exam Questions



## Question 1:

PQRS is a parallelogram. P is the point (2, 0), S is (4, 6) and Q lies on the  $x$ -axis, as shown.

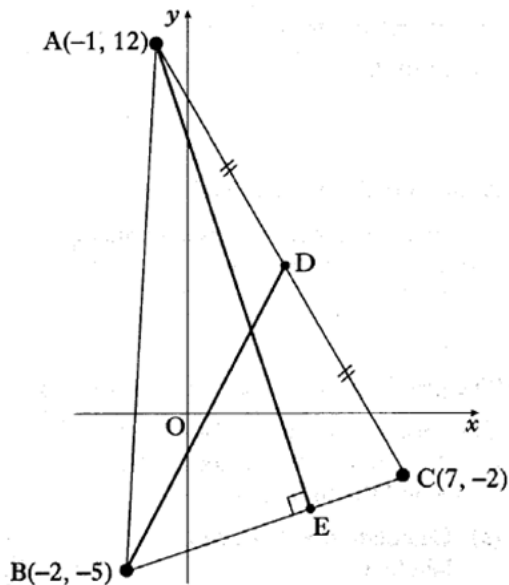
The diagonal QS is perpendicular to the side PS.



- (a) Show that the equation of QS is  $x + 3y = 22$ . 4  
(b) Hence find the coordinates of Q and R. 2

## Question 2:

Triangle ABC has vertices A(-1, 12), B(-2, -5) and C(7, -2).



- (a) Find the equation of the median BD. 3  
(b) Find the equation of the altitude AE. 3  
(c) Find the coordinates of the point of intersection of BD and AE. 3

My score: