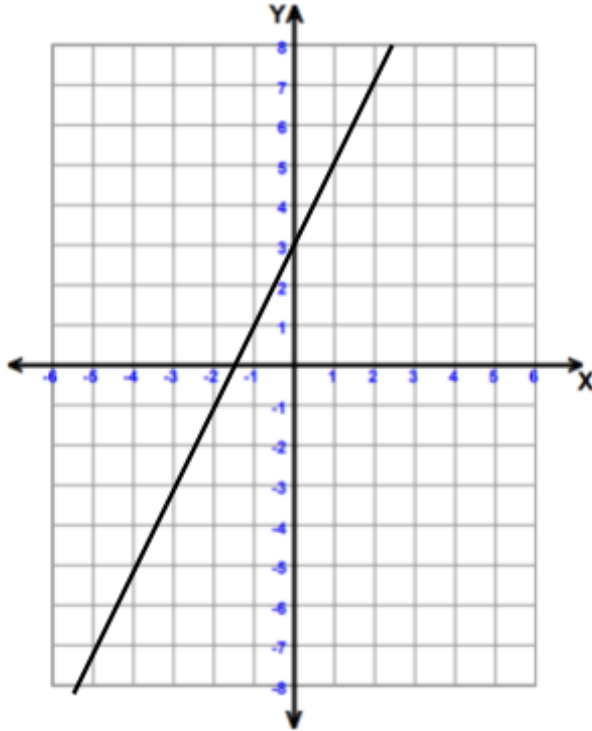


QT Quick Test 4G

Calculator



1. The graph shows part of a straight line.



(a) Write down the y-intercept (1 mark)

(b) Show that the gradient of the line is +2 (2 marks)

(c) Write down the equation of the line

(1 mark)

(d) The line continues to the right. Will this line pass through the point (20, 43)? Show how you decide.

(2 marks)

QT Quick Test 4G

Calculator



2. A triangle has sides 15.1cm, 15.6cm and 21.5cm. Is this a right angled triangle?
Show how you decide.

(4 marks)

3. Solve

(a) $\frac{x}{3} + 2 = 17$

(2 marks)

(b) $x^2 + 15x + 56 = 0$

(2 marks)

4. The scale on a map is 1 : 30000. How many kilometres on the ground are represented by 6cm on the map?

(3 marks)

QT Quick Test 4G

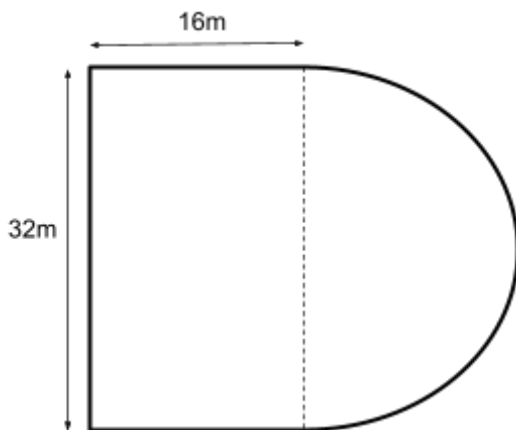
Calculator



5. Josh is paid £7.60 for the first 25 hours that he works each week. After 25 hours he is paid $1\frac{1}{2}$ times the hourly rate. Last week Josh worked for 33 hours. Work out how much Josh earned in total last week. (3 marks)

6. The diagram shows Carrie's lawn. It is in the shape of a rectangle 32m x 16m, and a semicircle. Carrie is going to build a perimeter fence around the lawn. She calculates the fence will cost £17.50 per metre. Carrie has a budget of £2000.

Will Carrie have enough money to build the perimeter fence? (4 marks)



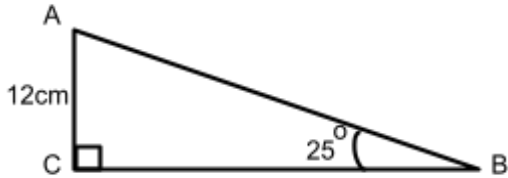
7. Lauren invests £4000 for 5 years, in an account offering a compound interest rate of 2.5%. Work out the value of Lauren's investment at the end of 5 years. (3 marks)

QT Quick Test 4G

Calculator



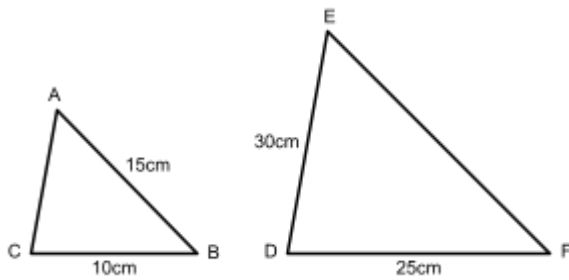
8. ABC is a right angled triangle. Calculate the length AB, giving your answer correct to 3 significant figures. (2 marks)



9. Convert 8m^3 into litres (2 marks)

10. Two triangles ABC and DEF are mathematically similar.

- (a) Work out the length EF. (2 marks)
(b) Work out the length AC. (2 marks)



(/ 35 marks)