

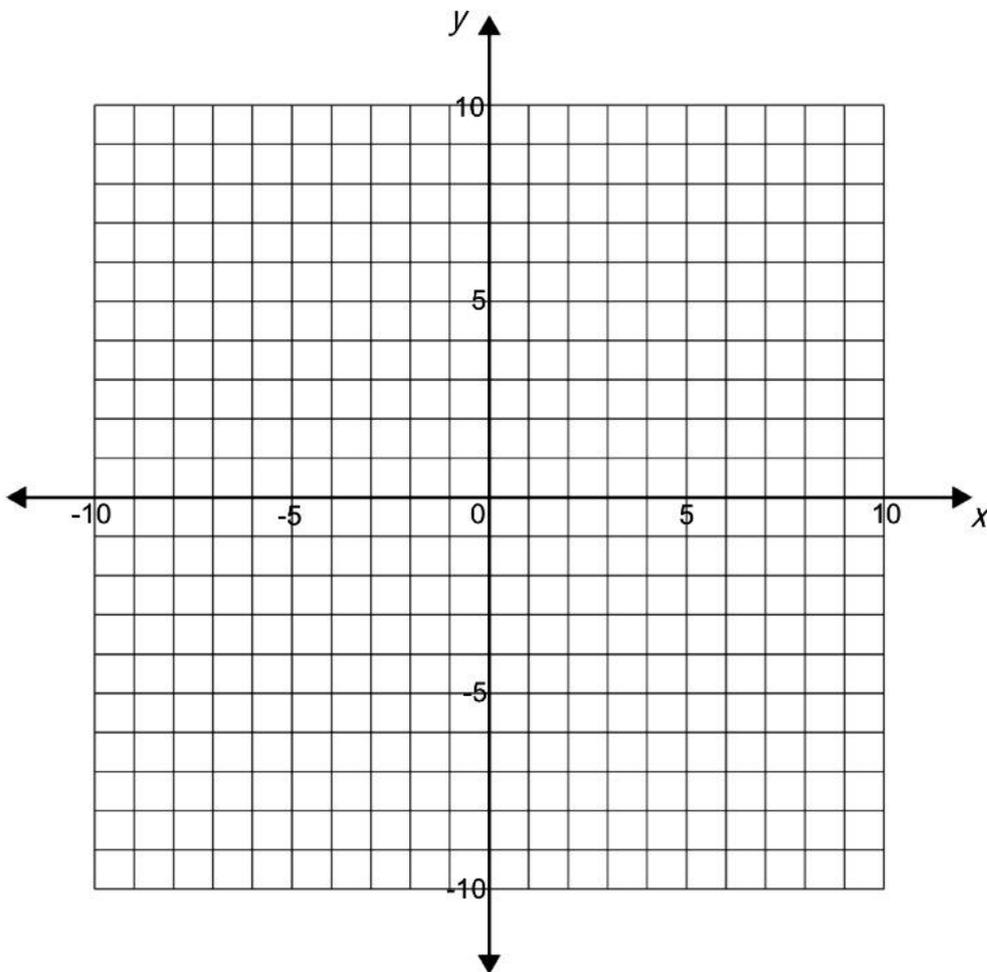
# National 4 Relationships - Practice Test 3

Worksheet by Mr R. Milton

- (1) (a) In your jotter, neatly copy and complete the table below for  
 $y = 2x - 3$

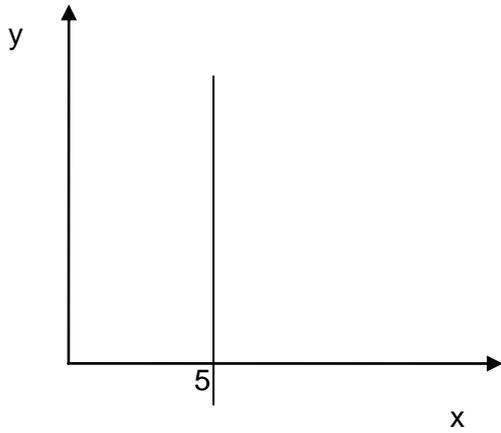
x	-2	-1	0	1	2	3	4
y							

- (b) In your jotter, neatly draw a coordinate diagram as shown below.



- (c) Plot the line  $y = 2x - 3$  on your coordinate diagram

(2) Write down the equation of line below.



(3) Solve the following equation:  $y + 4 = -3$

(4) The equation relating Distance, Speed and Time is:

$$D = S T$$

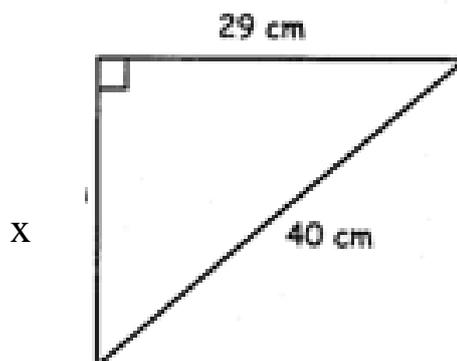
Change the subject of the formula to **S**.

(5) In Physics, the equation relating velocity, speed, acceleration and time is:

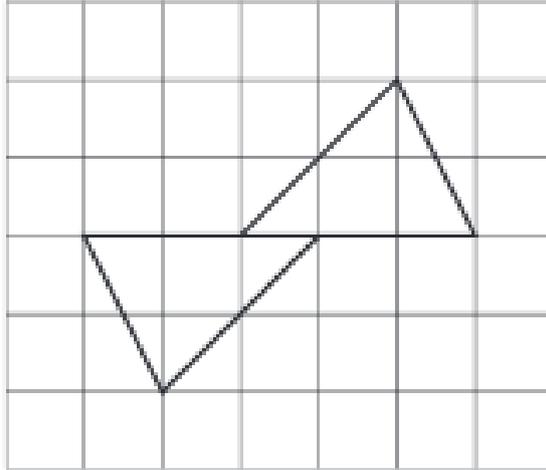
$$v = u + at$$

Change the subject of the formula to **a**.

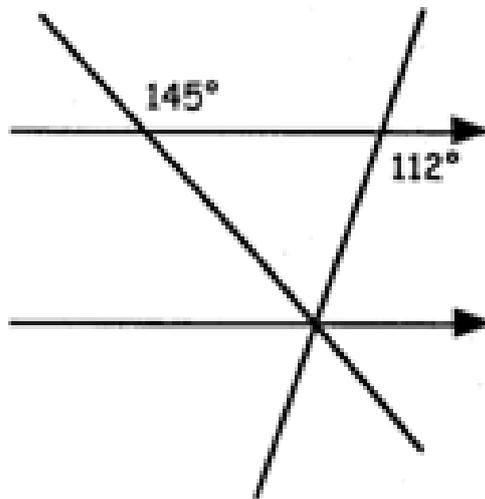
(6) Find  $x$  in the triangle



(7) In your jotter, neatly draw an enlargement of the given shape using a scale factor of **2**



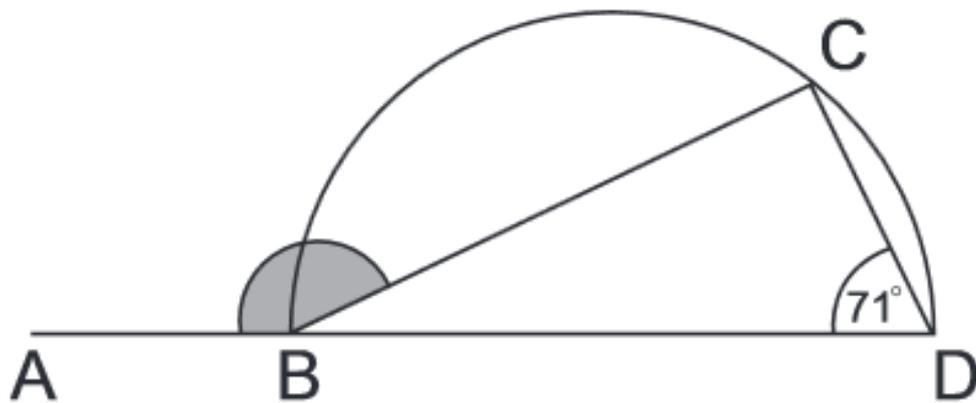
(8) In your jotter, neatly draw the diagram below and then calculate the size of all the missing angles. Write all the angles on your diagram.



(9) The diagram below shows a semi-circle with BD a diameter.

- C lies on the circumference
- $\angle CDB$  is  $71^\circ$
- AD is a straight line

(a) In your jotter, neatly draw the diagram below



(b) Calculate shaded angle ABC