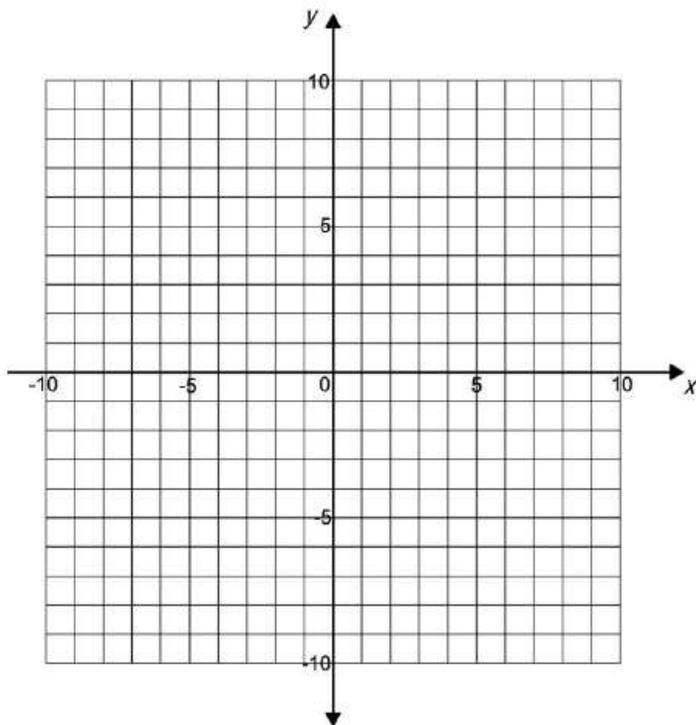


National 4 Relationships Part One Practice Assessment (All)

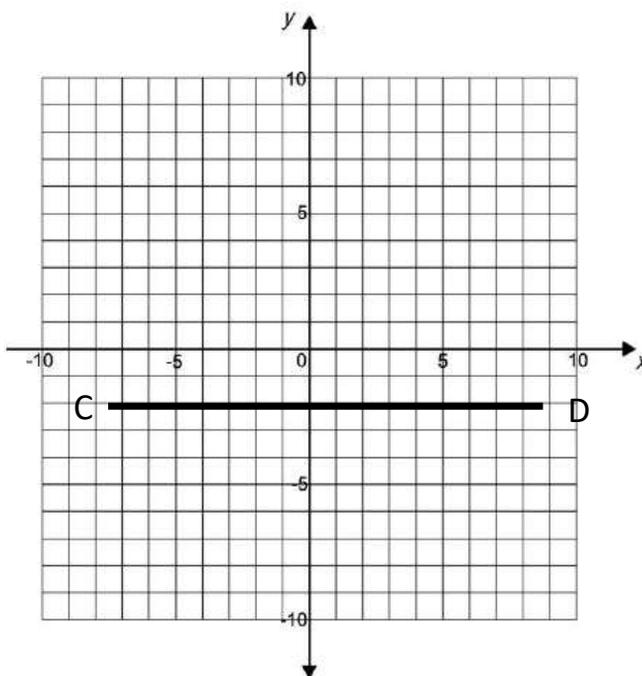
1. Complete the table below for $y = 4x - 5$

x	1	2	3



2. Line CD is shown on the grid below

Write down the equation of the line CD



3. Solve the following equation:

$$3y - 4 = -22$$

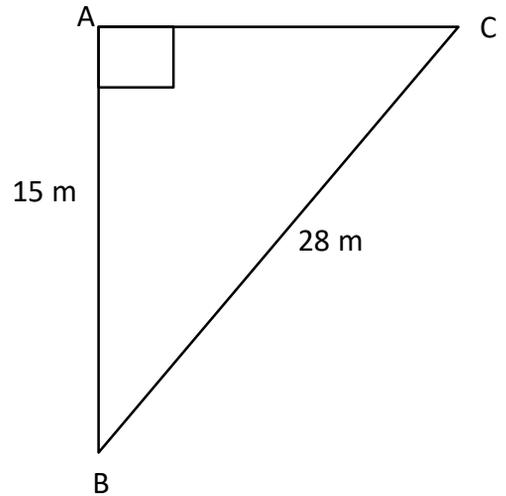
5. Change the subject of the formula to a

$$b = 7a + 8$$

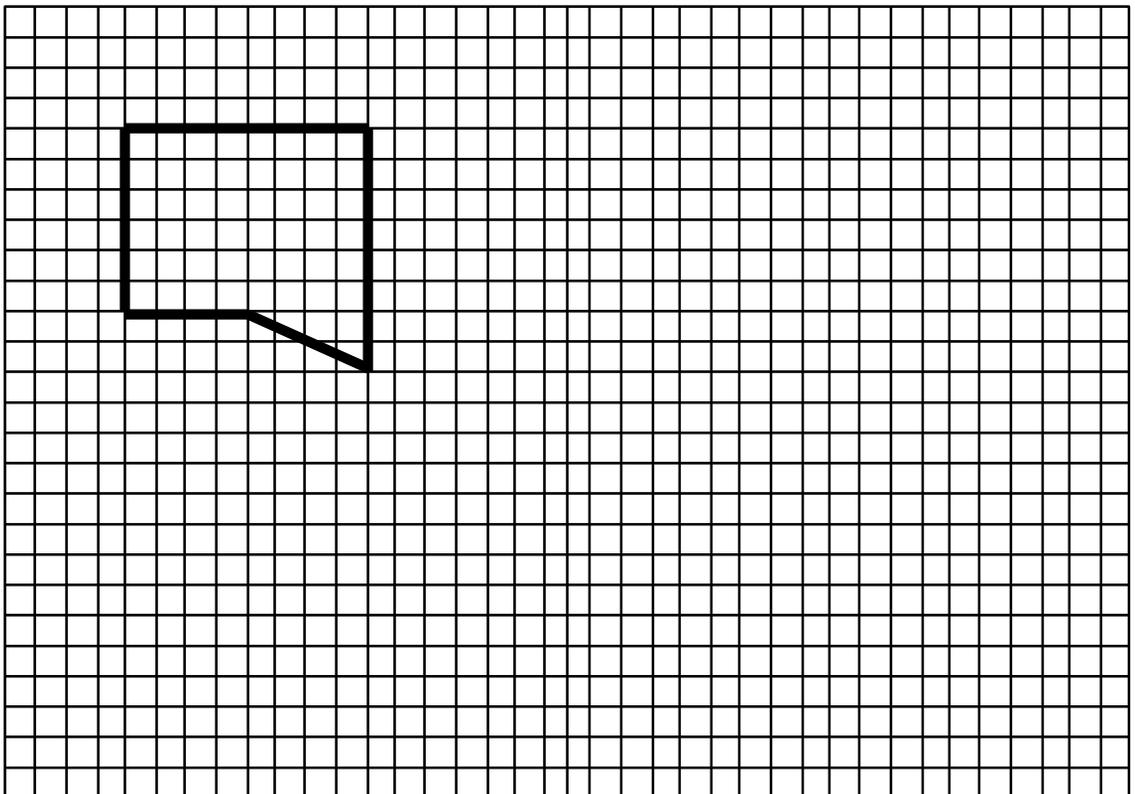
6. Triangle ABC is a right-angled triangle as shown in the diagram below

BC is 28 metres long and AB is 15 metres long.

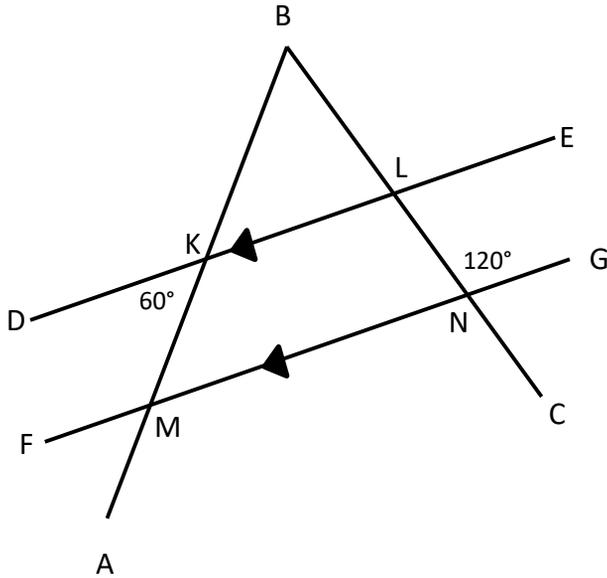
Calculate the length of AC in metres



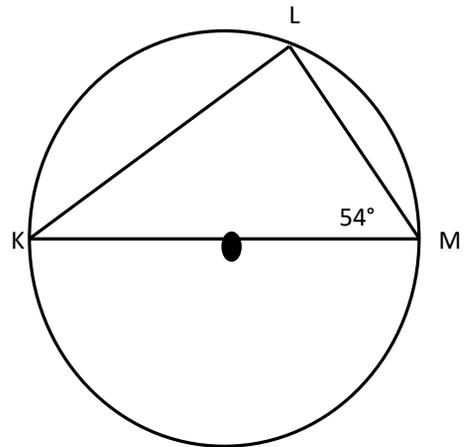
7. On the diagram below, draw an enlargement of the given shape using a scale factor of $\frac{3}{2}$



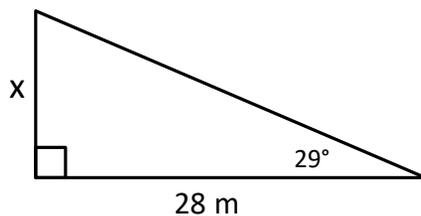
1. Calculate the size of angle ABC. **All working must be shown.**



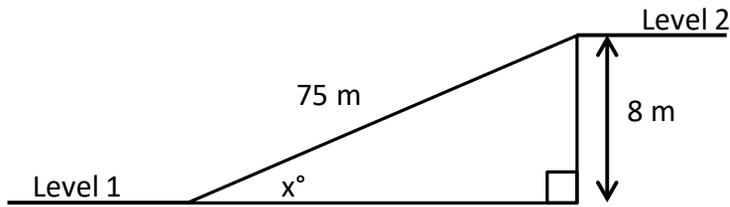
2. CD is a diameter of a circle centre O.
L is a point on the circumference of the circle
Calculate the size of angle LKM



3. Calculate the length of the side x in the following right-angled triangle below



4. A ramp 75m long slopes at an angle of x° from Level 1 to Level 2.
The height between levels is 8 metres.
(a) Calculate x°



- (b) For safety reasons x should be below 6° . Can the angle of the ramp be considered safe ?

5. A class of students sat a Geography and a History test. Here are the students marks

	Geography	History
Tom	85	70
Bob	50	60
Cecil	35	35
Bertie	70	75
Selma	80	85
Louise	75	25
Bruce	95	90

- (a) Draw a scattergraph on the grid provided
 (b) Draw a line of best fit
 (c) Walter scored 70 marks in his geography test. Use your line to estimate the mark that he would have got in his history test
 (d) Oliver scored 55 marks in his geography test but was absent for his history test. His teacher estimated her mark to be 50 for his history test.
 Is this a reasonable estimate ?

Marks

