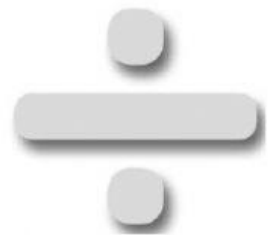


Algebra: word problems

Word problems can be solved by changing them into equations.

'Key' words can help you understand which operation to use:

addition (+), multiplication (x), subtraction (-) or division



1. Match the key words underlined in the table below to the type of operation they represent, and then write them as equations.

Une las palabras claves subrayadas en la tabla al tipo de operación que representan y luego, escríbelas como ecuaciones

2. Now solve the equations in the table. How old is Jon?

Ahora resuelve las ecuaciones en la tabla. ¿Qué edad tiene Jon?

	Key word = Operation	Equation
a The <u>sum</u> of Jon's age and 15 equals 29.	<i>sum = addition</i>	$x + 15 = 29$
b Three <u>times</u> Jon's age is 42.		
c The <u>difference</u> between Jon's age and the age of his younger brother, who is 10, is 4 years.		
d The <u>product</u> of Jon's age and 12 is 168.		
e Six <u>less than</u> Jon's age is 8.		
f 23 <u>more than</u> Jon's age equals 37.		

2 Solve these word problems using equations to help you.

1. The sum of two numbers is 41. The larger number is 1 more than 4 times the smaller number. What are these numbers?



2. The sum of two numbers is 4 times their difference. If one exceeds the other by 8, what are the numbers?

La n representa un número. Escriba una expresión para cada una de las descripciones

— A number ►

n

— The number plus seven ►

— One more than the number ►

$n + 1$

— One less than the number ►

— The number times two ►

— The number times two plus three ►

— The number times two minus four ►

A. True or false?

Are these statements true or false? You may need to look up the words in **bold** in your Letts Maths Dictionary. The instruction book for your calculator may also be useful.

1. There are two **square roots** of a positive integer.

true ☐ false ☐

2. Both of the **square roots** in question 1 are positive.

true ☐ false ☐

3. The **cube root** of a positive number is positive.

true ☐ false ☐

4. The **cube root** of a negative number is positive.

true ☐ false ☐

5. The calculator button x^y calculates **powers**.

true ☐ false ☐

6. The calculator button $\sqrt{}$ calculates **cube roots**.

true ☐ false ☐