1.3 Lesson 3: algebraic and word expressions

Vocabulary					
Operations	Addition	12+3, "three added to twelve"			
	Subtraction	2-5=-3, "two minus five is equal to minus three" (or negative three")			
	Multiplication	$3 \times 5 = 3 \cdot 5 = 15$, "three times five"			
	dot product				
	Fractions	$\frac{1}{4}$ one half, $\frac{1}{4}$ one fourth, $\frac{3}{5}$, "three over five" or "three-fifths"			
	division/ratio	$15 \div 3 = \frac{15}{3} = 5$, "fifteen divided by 3"			
	square root	$\sqrt{12}$ "square root of twelve"			
		4^{10} "four to the power or 10 "			
	exponents a^b	5^3 "five cubed"; $2(x+1)^3$ "two times the cube of ex plus one"			
		3^2 "three squared"; $(2x)^2$ "two ex all squared"			

Exercise 10

Sort these words in the right column.

Minus / to share / to take away / reduce / total up / more than / less than / decrease / times / increase / to halve / to double / the difference between / plus / double / the product / to spread out equally / threefold / to treble / in addition to

add	subtract	multiply	divide
at words are new to	you? Use them in a si	imple sentence.	l

Vocabulary					
Brackets	() round brackets	or parentheses $3(x+2)$ "three times all of ex plus two"			
	[] square brackets	same meaning $3 - (x - 1)$ "three minus all of ex minus 1"			
	{} curly brackets	used to describe $sets$ like $\{2 ; 3 ; 4\}$			

Exercise 11 - See answers

Write down expressions as said by the teacher. Don't do any of the *computations(US)*⁶

Exercise 12

Find out the *algebraic expressions* matching the following *word expression*.

five take away sixteen	7 divided by x	
ten more than twelve	p decreased by 11	
divide x by 6	ratio of length to time	
times six by seven	one fifth of x	
two by four	two plus five all squared	
7 over 3	two times all of three minus seven	

Exercise 13 — **P** Work in pairs.

One of you will read and expression and your partner will write it down and evaluate it. Don't show your paper. Spell when necessary. Then change roles.

Student A is the reader	Student A is the writer
$5 \times 3 + 2 =$	
$7 \times 3 - 10 =$	
12 - (2 + 5) =	
(11-5)(11+5) =	
$3 \times 5^2 =$	
$5 - (2 \times 3)^2 =$	

⁶calculations(UK)