

Unit 3: Expressions and Equations

Variables and Expressions



Algebraic expressions use letters and symbols to represent words. Certain word expressions indicate certain operations. Some of the more common word expressions and the operations they indicate are shown in the table below.

Operation	Word Expression
Addition	<ul style="list-style-type: none"> • more than • the sum of
Subtraction	<ul style="list-style-type: none"> • less than • fewer than

Fill in the table. The first one has been done for you.

	Word Expression	Operation	Algebraic Expression
1.	36 less than a number t	Subtraction	$t - 36$
2.	25 more than a number y		
3.	g fewer than 110		
4.	h more than 17.8		
5.	the sum of 32 and a number d		
6.	m less than 75		
7.			$r + 5$
8.			$n - 8.3$
9.			$47 + w$
10.			$7.12 - d$
11.			$b - 34$

Translate each expression into an algebraic expression, using parentheses as necessary.

1. The number z multiplied by the sum of x and y $z(x + y)$
2. The sum of k and 7 divided by v _____
3. The number m divided by the sum of z and u _____
4. The product of a , b , and c decreased by d _____
5. The number p subtracted from the product of 10 and x _____
6. Two times the difference between n and 4 _____
7. The number r added to the product of a and c _____
8. Five multiplied by the difference between b and k _____
9. The product of fourteen and c , decreased by d _____
10. The sum of r and 9, divided by k _____
11. Seven times the difference between d and eleven _____
12. The number a multiplied by the sum of b and c _____
13. The number u subtracted from the product of r and s _____
14. The number s divided by the sum of t and u _____
15. The sum of r and s , multiplied by five _____
16. The difference between r and s , multiplied by t _____