



TRANSLATING ENGLISH PHRASES INTO ALGEBRAIC EXPRESSIONS

ENGLISH PHRASES

ALGEBRAIC EXPRESSIONS

Ten more than a number	$x + 10$
A number added to five.....	$5 + x$
<u>A number increased by thirteen</u>	$x + 13$
Four less than ten	$10 - 4$
Six less than a number	$x - 6$
A number decreased by seven.....	$x - 7$
The difference between a number and three	$x - 3$
<u>The difference between three and a number</u>	$3 - x$
Twice a number.....	$2x$
Half (of) a number	$\frac{1}{2}x$ or $\frac{x}{2}$
A number squared <i>or</i> the square of a number	x^2
The square of five more than a number	$(x + 5)^2$
Five more than the square of a number <i>or</i> the square of a number, increased by five.....	$x^2 + 5$
Ten percent of a number	$0.10x$
<u>Ten times a number</u>	$10x$
Quotient of a number and three.....	$\frac{x}{3}$
Quotient of three and a number.....	$\frac{3}{x}$
Five times the sum of a number and two	$5(x + 2)$
<u>Five times the difference of a number and four</u>	$5(x - 4)$
Five is three more than a number	$5 = x + 3$
The product of two and a number is ten.....	$2x = 10$
One half (of) a number is ten	$\frac{1}{2}x = 10$
Ten less than eight times a number is five more than the number	$8x - 10 = x + 5$
<u>The sum of five times a number and ten is equal to the product of 15 and the number</u>	$5x + 10 = 15x$
The sum of two consecutive integers	$x + (x + 1)$
The sum of two consecutive even integers	$x + (x + 2)$
The sum of two consecutive odd integers	$x + (x + 2)$
The sum of the squares of two consecutive integers.....	$x^2 + (x + 1)^2$
The sum of the cubes of two consecutive integers.....	$x^3 + (x + 1)^3$



TRANSLATING ENGLISH TERMS INTO ALGEBRAIC OPERATORS

Accumulate	+	Find the total.....	+	Quadruple(d).....	\times
Add, add up, added to, addition, additional.....	+	Fraction.....	\div	Quarter	\div
Alike.....	=	Fraction of	\times	Quantity	(...)
Also	+	Gain	\times or +	Quotient (of)	\div
Altogether	+	Gives (a result of), giving	=	Raise, raised by, rise	+
Amounts to.....	=	Go (went) up.....	+	Ratio (of).....	\div
Amplify, amplified by.....	\times	Go (went) up by a factor of	\times	Reciprocal (of)	\div
And.....	+	Greater (than)	+	Reduce, reduce(d) by	-
Appreciate	+	Grew by, grow by	+	Reduce(d) by a factor of	\div
Are (equal)	=	Halved	\div	Represents	=
Area.....	\times	Identical to.....	=	Result (is), results (are), results in=	
Balances	=	In addition (to).....	+	Same (result) as.....	=
Bigger (than)	+	In all.....	+	Smaller (than)	-
Coincides (with).....	=	In excess	+	Smaller by a factor of.....	\div
Combine(d)	+	Increased (by), increment	+	Shorten (by), shorter (than).....	-
Corresponds (to).....	=	Increase(d) by a factor of.....	\times	Subdivide	\div
Cut (by)	-	Intensified by	\times	Subtract, subtracted from	-
Cut by a factor of	\div	Interest on	\times	Sum (of), summation	+
Decline, declined by.....	-	Is (equal).....	=	Take away, take from.....	-
Decline(d) by a factor of	\div	Is greater (than)	>	Tally (up)	+
Decrease(d) by, decrement.....	-	Is less (than).....	<	Thrice	\times
Decrease(d) by a factor of	\div	Less (than)	-	Times, times as much, times larger, times more, times older ...	\times
Deduct, deducted from	-	Larger (than)	+	Times less, times smaller, times younger	\div
Depreciate	-	Lengthen (by), longer (than).....	+	Together	+
Difference (of)	-	Lower, lowered by	-	Total (is).....	=
Diminished (by)	-	Matches	=	Total of.....	+
Diminished by a factor of	\div	Magnified by	\times	Triple(d).....	\times
Divide, divided by, divided into..	\div	Minus.....	-	Twice	\times
Double(d)	\times	More (than).....	+	Volume.....	\times
Dropped by.....	-	Multiple, multiply, multiplied by	\times	Was (equal), were (equal).....	=
Dropped by a factor of	\div	Narrower (than)	-	Wider (than).....	+
Dwindle.....	-	Net	+	Will be (equal)	=
Equal, equals	=	Of [usually in connection with fractions].....	\times	... Years older (than)	+
Equivalent (to)	=	Older (than)	+	Yields	=
Exceeds	>	On top of.....	+		
Exceeds by	+	Per.....	\div		
Factors.....	\times	Percent (of).....	\times		
Fall	-	Perimeter	+		
Farther	+	Plus	+		
Fewer than.....	-	Product (of).....	\times		