## **Math Translation Guide**

The chart below gives you some of the terms that come up in a lot of word problems. Use them in order to translate or "set-up" word problems into equations.

English	Math	Example	Translation
What, a number	<i>x, n,</i> etc.	Three more than a number is 8.	n+3=8
Equivalent,	=	Danny <b>is</b> 16 years old.	<i>d</i> = 16
equals, is, was,		A CD costs 15 dollars.	c = 15
has, costs			
Is greater than	>	Jenny has more money than Ben.	j > b
Is less than	<	Ashley's age <b>is less than</b> Nick's.	a < n
At least, minimum	≥	There are at least 30 questions	<i>t</i> ≥ 30
At most,	≤	on the test.	
maximum		Sam can invite a maximum of 15	s ≤ 15
		people to his party.	
More, more than,	+	Kecia has 2 <b>more</b> video games	k = j + 2
greater, than,		than John.	k + j = 11
added to, total,		Kecia and John have a <b>total</b> of 11	
sum, increased		video games.	
by, together		1 0 0 0 0 1	
Less than, smaller	-	Jason has 3 <b>fewer</b> CDs than	j = c - 3
than, decreased		Carson.	j-b=75
by, difference, fewer		The <b>difference between</b> Jenny's and Ben's savings is \$75.	
Of, times, product	Х	Emma has <b>twice</b> as many books	e = 2 x j
of, twice, double,	^	as Justin.	or
triple, half of,		as sustin.	e = 2i
quarter of			0 – 2)
quarter or		Justin has <b>half</b> as many books as	$j = C \times \frac{1}{2}$
		Emma.	or
			j = e/2
			,
Divided by, per,	÷	Sophia has \$1 for every \$2 Daniel	$s = d \div 2$
for, out of, ratio of		has.	or
to			s = d/2
		The ratio of Daniel's savings to	
		Sophia's savings is 2 to 1.	d/s = 2/1