

SWEET INEQUALITIES (TEACHER GUIDE)

Write an inequality for each scenario (verbal problem). Then solve each inequality.

Verbal Problem	Your Work
1) Mariana donated 2 baked goods for the fundraiser, but that still means there are not more than 12 baked goods to sell.	$x + 2 \leq 12$ $\begin{array}{r} -2 \quad -2 \\ \hline x \leq 10 \end{array}$
2) After Nevaeh ate 2 cookies, there were more than 8 cookies remaining.	$x - 2 > 8$ $\begin{array}{r} +2 \quad +2 \\ \hline x > 10 \end{array}$
3) If Marcos makes 2 more pies, he will have at least 12 pies for the birthday party.	$x + 2 \geq 12$ $\begin{array}{r} -2 \quad -2 \\ \hline x \geq 10 \end{array}$
4) Jeremiah burned 2 batches of cupcakes, but he still has less than 8 batches of cupcakes.	$x - 2 < 8$ $\begin{array}{r} +2 \quad +2 \\ \hline x < 10 \end{array}$
5) Two inches more than the height of Tyron's cake is at least $7\frac{1}{3}$ inches.	$x + 2 \geq 7\frac{1}{3}$ $\begin{array}{r} -2 \quad -2 \\ \hline x \geq 5\frac{1}{3} \end{array}$
6) Two more cups of Amir's cookie dough will give him no more than $7\frac{1}{3}$ cups of cookie dough.	$x + 2 \leq 7\frac{1}{3}$ $\begin{array}{r} -2 \quad -2 \\ \hline x \leq 5\frac{1}{3} \end{array}$
7) If Mika lets her dough rest for an extra $2\frac{1}{3}$ hours, then it will have rested for more than $7\frac{2}{3}$ hours in total.	$x + 2\frac{1}{3} > 7\frac{2}{3}$ $\begin{array}{r} -2\frac{1}{3} \quad -2\frac{1}{3} \\ \hline x > 5\frac{1}{3} \end{array}$
8) If Amelia reduces the amount of vanilla in the recipe by $2\frac{1}{3}$ teaspoons, then she will have less than 3 teaspoons of vanilla to her mix.	$x - 2\frac{1}{3} < 3$ $\begin{array}{r} +2\frac{1}{3} \quad +2\frac{1}{3} \\ \hline x < 5\frac{1}{3} \end{array}$

SWEET INEQUALITIES (KEY)

Find the signs that match each given scenario. Write the letters in the corresponding columns.

Verbal Problem	Algebraic Problem	Algebraic Solution	Visual Solution
1) Mariana donated 2 baked goods for the fundraiser, but that still means there are not more than 12 baked goods to sell.	D	K	V
2) After Nevaeh ate 2 cookies, there were more than 8 cookies remaining.	B	I	R
3) If Marcos makes 2 more pies, he will have at least 12 pies for the birthday party.	E	N	W
4) Jeremiah burned 2 batches of cupcakes, but he still has less than 8 batches of cupcakes.	G	L	S
5) Two inches more than the height of Tyron's cake is at least $7\frac{1}{3}$ inches.	A	M	Z
6) Two more cups of Amir's cookie dough will give him no more than $7\frac{1}{3}$ cups of cookie dough.	F	J	T
7) If Mika lets her dough rest for an extra $2\frac{1}{3}$ hours, then it will have rested for more than $7\frac{2}{3}$ hours in total.	C	Q	Y
8) If Amelia reduces the amount of vanilla in the recipe by $2\frac{1}{3}$ teaspoons, then she will have less than 3 teaspoons of vanilla to her mix.	H	P	U