

Pg 27-28

9	not a solution	35	5
11	solution	37	8
13	not a solution	39	9
15	solution	41	21
27	not a solution	42	2
29	solution	45	5
31	solution	47	6
33	solution	49	D
		50	25

1.4 cont. Inequalities

Sept. 12, 2006

- Inequalities: a statement formed by placing an inequality symbol between two expressions.

* Must have an Inequality Sign.

Inequality	Meaning	Example
$<$	less than	$5 < 6$
$>$	greater than	$6 > 5$
\leq	less than or equal to	$2 \leq 3$ $2 \leq 2$
\geq	greater than or equal to	$6 \geq 5$ $6 \geq 6$

Check Let $x=4$

$$x+3 \geq 9 \quad \rightarrow \text{exp.}$$

$$(4)+3 \stackrel{?}{\geq} 9 \quad \rightarrow \text{sub.}$$

$$\begin{array}{c} | \\ 7 \neq 9 \end{array}$$

False...
4 is Not a Solution

$$2x-1 < 8$$

$$2(4)-1 \stackrel{?}{<} 8$$

$$\begin{array}{c} | \\ 8-1 \stackrel{?}{<} 8 \end{array}$$

$$\begin{array}{c} | \\ 7 < 8 \quad \checkmark \end{array}$$

True...
4 is a Solution

Check n for $3n-4 \leq 8$

Start at $n=2$: $3(2)-4 \stackrel{?}{\leq} 8$
 $6-4 \stackrel{?}{\leq} 8$
 $2 \leq 8 \checkmark$ True...

try $n=3$ $3(3)-4 \stackrel{?}{\leq} 8$
 $9-4 \stackrel{?}{\leq} 8$
 $5 \leq 8 \checkmark$ True...

try $n=4$: $3(4)-4 \stackrel{?}{\leq} 8$
 $12-4 \stackrel{?}{\leq} 8$
 $8 \leq 8 \checkmark$ True...

try $n=5$ $3(5)-4 \stackrel{?}{\leq} 8$
 $15-4 \stackrel{?}{\leq} 8$
 $11 \leq 8$ False...

$n \leq 4$

Real Life Math:

* Cat: needs less than or equal to 500 cal. a day

* 2 Feedings

Does 250 cal. per feeding work?

$$(\# \text{ of feedings}) (\# \text{ of cal}) \leq 500$$

$$(2)(250) \stackrel{?}{\leq} 500$$

$$500 \leq 500$$

True... 250 cal's work!

O.T.L.: work done
in Class + Finished
if Needed Somewhere else.

O.T.L.

① Pg 27-29: 1-7 (0); 17-25 (0);
51-57 (0); 61, 63;
65-91 (odd)