

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

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- 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  $x=4$

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

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

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

False...  
4 is Not a Solution

$$2x-1 < 8$$

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

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

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

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)