

Algebra 0507

Chapter 1

Intro to WS # 6

Name _____

Solve. The replacement set is : $\{2, 4, 6, 8\}$

1. $x + 2 < 10$

Solution Set:

 $\{2, 4, 6\}$

$x = 2$ $2 + 2 < 10$ $4 < 10$ T	$x = 4$ $4 + 2 < 10$ $6 < 10$ T	$x = 6$ $6 + 2 < 10$ $8 < 10$ T	$x = 8$ $8 + 2 < 10$ $10 < 10$ F
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2. $x \neq 3 + 5$

Solution Set:

 $\{2, 4, 6\}$

$x = 2$ $2 \neq 3 + 5$ $2 \neq 8$ T	$x = 4$ $4 \neq 3 + 5$ $4 \neq 8$ T	$x = 6$ $6 \neq 3 + 5$ $6 \neq 8$ T	$x = 8$ $8 \neq 3 + 5$ $8 \neq 8$ F
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3. $3x \geq 18$

Solution Set:

 $\{6, 8\}$

$x = 2$ $3(2) \geq 18$ $6 \geq 18$ F	$x = 4$ $3(4) \geq 18$ $12 \geq 18$ F	$x = 6$ $3(6) \geq 18$ $18 \geq 18$ T	$x = 8$ $3(8) \geq 18$ $24 \geq 18$ T
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4. $x^2 - 10 > 6$

Solution Set:

 $\{6, 8\}$

$x = 2$ $2^2 - 10 > 6$ $4 - 10 > 6$ $-6 > 6$ F	$x = 4$ $4^2 - 10 > 6$ $16 - 10 > 6$ $6 > 6$ F	$x = 6$ $6^2 - 10 > 6$ $36 - 10 > 6$ $26 > 6$ T	$x = 8$ $8^2 - 10 > 6$ $64 - 10 > 6$ $54 > 6$ T
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