Solving Inequalities 2

Solve each inequality for x. Remember that you will sometimes need to reverse the inequality sign.

1. $4(x+1)-10<x$ **2.** $6(x-2)+8>2x$ **3.** $5(x-1)+2>x+9$

4. $10-2(x+2)>0$ **5.** $6-3(x-2)>0$ **6.** $5-3(x-1)>14$

7. $1-3(x-2)<4$ **8.** $6-2(x-1)>18$ **9.** $7-2(x-2)<1$

10. $2x-3(1-x)\geq 7$ **11.** $12-4(x-2)\leq 8$ **12.** $5x-3(x+4)>0$

13. $2(x+1)+x<14-x$ **14.** $2(x-4)+5<9-x$ **15.** $2-3(1-x)>x+7$

16. $3(x+1)+2(x-4)>35$ **17.** $2(x+2)+4(6-x)>30$

18. $5(x+2)-3(x-2)>24$ **19.** $8(x+1)-3(x-2)>24$

20. $4(x+5)-2(x+2)<10$ **21.** $4(2x+1)-2(x-3)\geq 40$

22. $2(5x+3)-3(2x-1)<1$ **23.** $2(2x-3)-4(1-x)\leq 5x+8$

24. $2(x-8)-4(2x-1)>18$

Answers

1.	$x < 2$	**2.**	$x > 1$	**3.**	$x > 3$	**4.**	$x < 3$
5.	$x < 4$	**6.**	$x < -2$	**7.**	$x > 1$	**8.**	$x < -5$
9.	$x > 5$	**10.**	$x \geq 2$	**11.**	$x \geq 3$	**12.**	$x > 6$
13.	$x < 3$	**14.**	$x < 4$	**15.**	$x > 4$	**16.**	$x > 8$
17.	$x < -1$	**18.**	$x > 4$	**19.**	$x > 2$	**20.**	$x < -3$
21.	$x \geq 5$	**22.**	$x < -2$	**23.**	$x \leq 6$	**24.**	$x < -5$