Solving Compound Inequalities

Multi-step: S3

Solve each inequality.

$$1) \sqrt{-4 \le \frac{3x+2}{10} < -1}$$

$$2(6x + 8) < -32 \text{ or } \frac{5x - 9}{7} \ge 3$$

3) $\int x + \frac{8x}{3} \ge -11$ and 5(

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5) $\left(-36 \ge 9(6x + 14)\right)$ or

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$$3 \frac{-x + 19}{13} \le 2$$

7)
$$\left(\frac{-x+15}{9} > 2 \text{ or } \frac{-x-7}{6} \le -3 \right)$$

3)
$$\left(-4 < \frac{x}{3} + x \text{ and } -26 > 2(11x + 9)\right)$$

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Multi-step: S3

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2)
$$\left(2(6x+8) < -32 \text{ or } \frac{5x-9}{7} \ge 3 \right)$$

____4 or x≥6

3) $\left(x + \frac{8x}{3} \ge -11 \text{ and } 5 \right)$

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x >

5) $-36 \ge 9(6x + 14)$ or

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|1< x<9

 $3 \frac{-x + 19}{13} \le 2$

' ≤ x < 18

7)
$$\left(-\frac{-x+15}{9} > 2 \text{ or } \frac{-x-7}{6} \le -3 \right)$$

x < -3 or $x \ge 11$

3)
$$\left(-4 < \frac{x}{3} + x \text{ and } -26 > 2(11x + 9)\right)$$

-3 < x < -2