

Math 1513 - College Algebra

Discussion Board Week 3 - Due 2018.02.04

Solve the following compound inequalities. Write your solution in interval notation **and** draw the solution on a number line.

1. $3x - 4 \leq 0$ and $2x + 1 \geq 3$
2. $3x - 4 \leq 0$ or $2x + 1 > 3$
3. $3x - 4 \leq 0$ and $2x + 1 \leq 3$
4. $3x - 4 < 0$ or $2x + 1 \leq 3$
5. $3x - 4 \geq 0$ and $2x + 1 \leq 3$
6. $3x - 4 > 0$ or $2x + 1 < 3$
7. $3x - 4 \geq 0$ and $2x + 1 \geq 3$
8. $3x - 4 \geq 0$ or $2x + 1 \geq 3$
9. $5x + 3 < -1$ and $-2x + 7 \geq -3$
10. $5x + 3 \leq -1$ or $-2x + 7 \geq -3$
11. $5x + 3 \leq -1$ and $-2x + 7 \leq -3$
12. $5x + 3 \leq -1$ or $-2x + 7 < -3$
13. $5x + 3 \geq -1$ and $-2x + 7 \leq -3$
14. $5x + 3 \geq -1$ or $-2x + 7 \leq -3$
15. $5x + 3 \geq -1$ and $-2x + 7 \geq -3$
16. $5x + 3 > -1$ or $-2x + 7 > -3$
17. $-2 + 6x \leq 4$ and $-2(x + 7) \geq 2$
18. $-2 + 6x \leq 4$ or $-2(x + 7) \geq 2$
19. $-2 + 6x \leq 4$ and $-2(x + 7) \leq 2$
20. $-2 + 6x < 4$ or $-2(x + 7) \leq 2$
21. $-2 + 6x \geq 4$ and $-2(x + 7) \leq 2$
22. $-2 + 6x \geq 4$ or $-2(x + 7) \leq 2$
23. $-2 + 6x > 4$ and $-2(x + 7) \geq 2$
24. $-2 + 6x > 4$ or $-2(x + 7) > 2$
25. $-2(3 + 6x) \geq 4$ or $5(x + 7) \leq 0$