

## Additional Review

Date \_\_\_\_\_

- 1) A saline solution was made by mixing 2 gal. of a 86% saline solution and 6 gal. of a 46% saline solution. Find the concentration of the new mixture.
- A) 15%      B) 56%  
C) 78%      D) 70%
- 2) Mark wants to make a 9% acid solution. He has already poured 2 L of pure water into a beaker. How many L of a 15% acid solution must he add to this to create the desired mixture?
- A) 2 L      B) 5 L  
C) 4 L      D) 3 L
- 3) 9 gal. of a saline solution was mixed with 11 gal. of pure water to make a 18% saline solution. Find the percent concentration of the first solution.
- A) 40%      B) 60%  
C) 35%      D) 52%

**Solve each equation.**

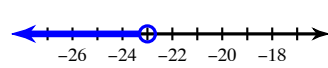
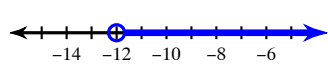
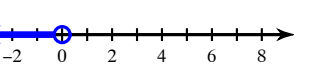
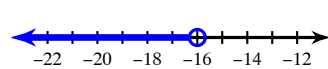
- 4)  $-11 = 3n - 3 - 5$
- A)  $\{-7\}$       B)  $\{-1\}$   
C)  $\{-10\}$       D) No solution.
- 5)  $-33 - n = -2(-6 - 7n)$
- A)  $\{-3\}$       B)  $\{-4\}$   
C)  $\{-14\}$       D)  $\{11\}$

6)  $-14n - 12 = -7(2n - 3)$

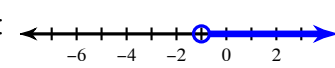
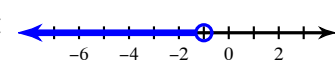
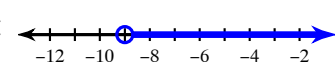
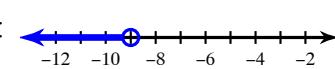
- A)  $\{-5\}$       B) No solution.  
 C)  $\{-16\}$       D)  $\{2\}$

**Solve each inequality and graph its solution. (Write solution in interval notation)**

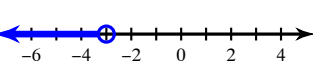
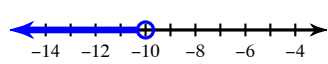
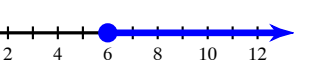
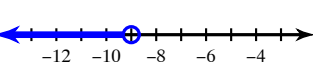
7)  $3 < -1 - n + 4$

- A)  $n < -23$  : 
- B)  $n < -12$  : 
- C)  $n < 0$  : 
- D)  $n < -16$  : 

8)  $33 - 8m > m + 6(-1 - 8m)$

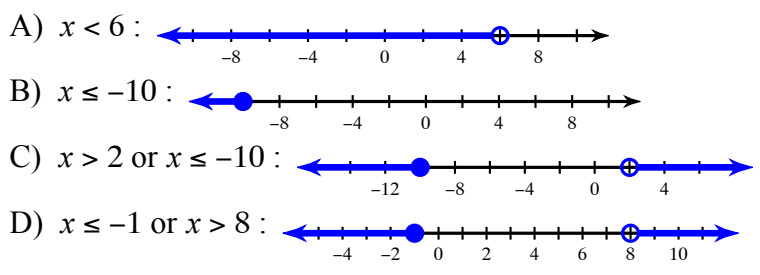
- A)  $m > -1$  : 
- B)  $m < -1$  : 
- C)  $m < -9$  : 
- D)  $m < -9$  : 

9)  $-7(-2 + 3x) < -7(1 + 4x)$

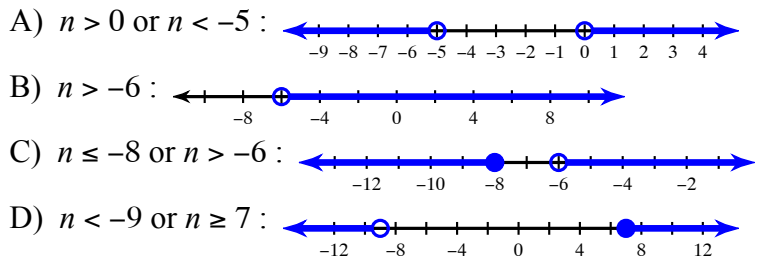
- A)  $x < -3$  : 
- B)  $x < -10$  : 
- C)  $x < 6$  : 
- D)  $x < -9$  : 

Solve each compound inequality and graph its solution. (Write solution in interval notation)

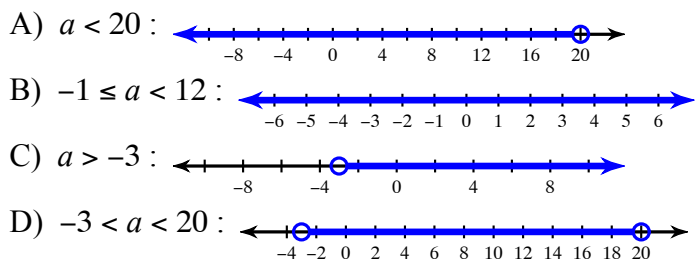
10)  $\frac{x}{2} > 1$  or  $6x \leq -60$



11)  $\frac{n}{4} > 0$  or  $8 + n < 3$

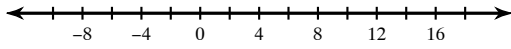


12)  $9 + 18a > 11a - 12$  and  $-2 + 8a < 18 + 7a$

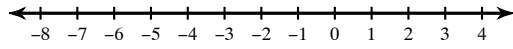


Solve each inequality and graph its solution. (Write solution in interval notation)

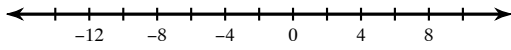
13)  $|x - 4| \geq 10$



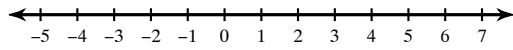
14)  $|1 - 9b| > -26$



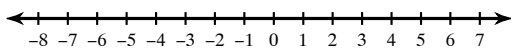
15)  $|8n + 7| \geq 73$



16)  $|8n + 1| - 2 > 5$



17)  $7 + 9|4n + 7| > -38$



## Answers to Additional Review (ID: 1)

- 1) B  
5) A  
9) A

- 2) D  
6) B  
10) C

- 3) A  
7) C  
11) A

- 4) B  
8) A  
12) D

