SECTION A-2

EXERCISE A

Solve each inequality. Then graph the solution set on the number line

1) $a + 2 < 3.5$

2) $11 - c \leq 8$

3) $2w + 19 < 5$

4) $4y + 7 > 31$

5) $n \leq \frac{n-4}{5}$

6) $5y + 7 \geq 3y - 17$

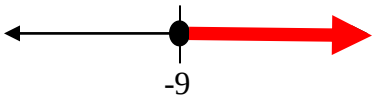
7) $6(b + 1) - (3b - 5) > 2$

8) $-\frac{2}{3}x \geq -10$

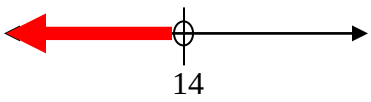
9) $\frac{1}{5} < \frac{7x}{3} + \frac{4}{15}$

Write the solution set that would represent the graphs shown.

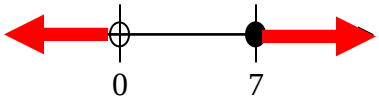
10)



11)



12)



EXERCISE B

Solve each inequality. Then graph the solution set on the number line.

13) $14 - 8n \leq 0$

14) $-4(5w - 8) < 33$

15) $0.02x + 5.58 < 0$

16) $6d + 3 \geq 5d - 2$

17) $2(g + 4) < 3g - 2(g - 5)$

18) $y < \frac{-y+2}{9}$

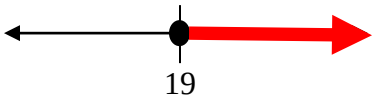
19) $\frac{4x+2}{6} < \frac{2x+1}{3}$

20) $12\left(\frac{1}{4} - \frac{n}{3}\right) \leq -6n$

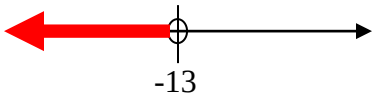
21) $\frac{1}{12} < \frac{7x}{3} + \frac{5}{6}$

Write the solution set that would represent the graphs shown.

22)



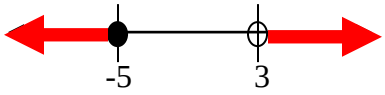
23)



EXERCISE C

Write the solution set that would represent the graphs shown.

24)



25)

26) Mr. Slick earns a salary of $34,000 per year plus 1.5% commission on his sales. If the average price of a car she sells is $30,500, about how many cars must she sell each year to make an annual income of at least $50,000?

a) Write an inequality to describe the situation.

b) Solve the inequality and interpret the solution.

ANSWERS:

See Mr. Paull for all number line graphs.
1) $a < 1.5$
3) $w < -7$
5) $n \leq -1$
7) $b > -3$
9) $x > -1/35$
11) $n < 14$
13) $n \geq 1.75$
15) $x < -279$
17) $g < 2$
19) no solution
21) $x > -9/28$
23) $n < -13$
25) $10 \leq n \leq 12$