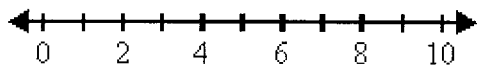


**Chapter 6 Practice Test****Solve and graph.**

1.  $-8p + 11 > -5$

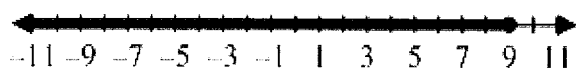


2.  $-8(3d - 2) \geq -200$

a.  $d \geq -9$



b.  $d \leq 9$



c.  $d \geq 9$



d.  $d < 9$

**Solve.**

3.  $8b - 9 \leq 9b + 2$

4.  $13b - 6 \leq 14b + 8$

a.  $b \geq 2$

b.  $b \geq -14$

c.  $b \leq 14$

d.  $b = 2$

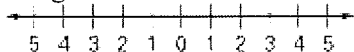
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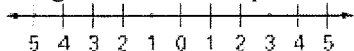
5. Maria is the hostess and manager at a restaurant. She receives a yearly salary of \$18,500, plus 4% of each day's receipts at the restaurant. Last year Maria's total pay was more than \$36,000. Write and solve an inequality to find the least possible value for the restaurant's receipts last year.

**Write an inequality that represents the statement and graph the inequality.**

6.  $x$  is greater than 1 or is less than  $-2$



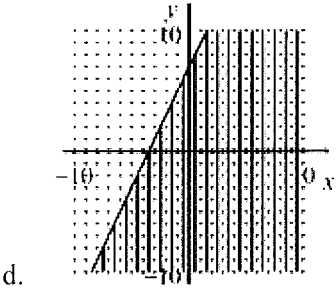
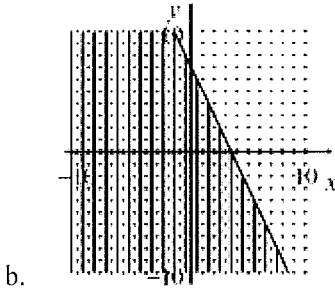
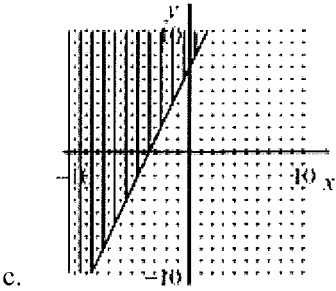
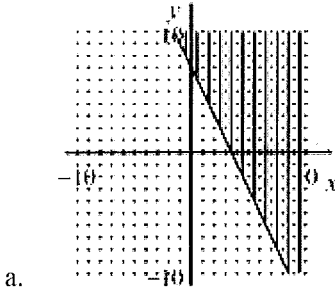
7.  $x$  is greater than or equal to 5 or is less than 0



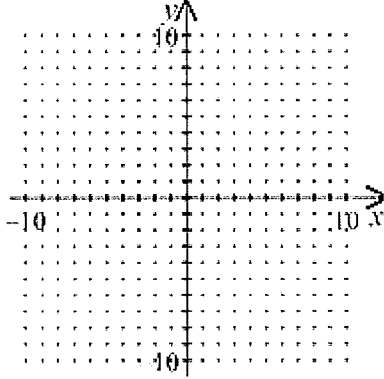
8. You have \$5 to spend on fruit for a picnic. Apples cost \$.99 per pound and bananas cost \$.49 per pound. Write an inequality to model the amounts of apples and bananas you can buy.

Graph.

\_\_\_\_\_ 9.  $-y \geq 2x - 7$



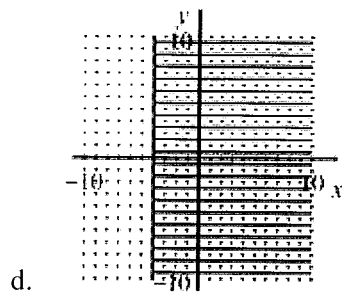
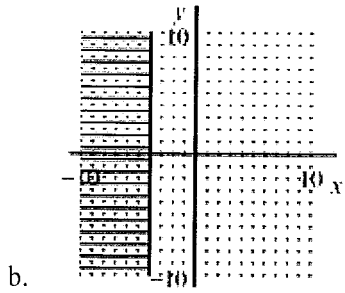
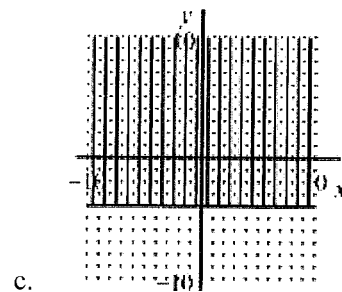
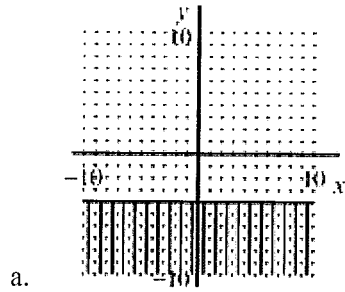
10.  $2x - 7y > -14$



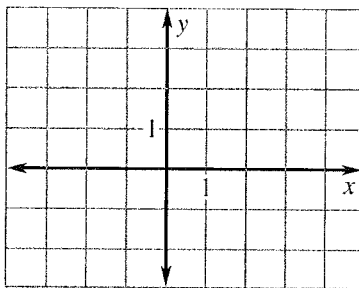
Name: \_\_\_\_\_

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11.  $x \geq -4$



12. Graph  $y \geq -\frac{2}{3}x$ .

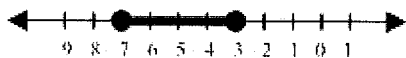


13. Solve  $-6 \leq 3x - 15 \leq 12$ . Graph your solution.

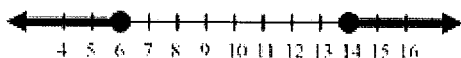
**Solve. Graph your solution.**

14.  $-4 \leq 2x + 10 \leq 4$

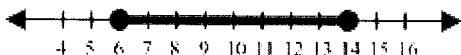
a.  $-7 \leq x \leq -3$



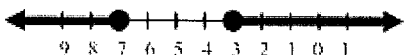
b.  $x \leq 6$  or  $x \geq 14$



c.  $6 \leq x \leq 14$



d.  $x \leq -7$  or  $x \geq -3$



15.  $x + 3 \leq 5$  and  $-3x < 12$

16. Solve the inequality  $-2 < 1 + x \leq 2$ . Graph your solution.

17. Solve the inequality  $4 < 2(1 - 3x) < 10$ . Graph your solution.

**Solve the inequality.**

18.  $x + 5 > x + 7$  or  $x + 3 \leq 3x - 4$

19.  $2x \geq 8$  or  $-2x + 1 > -13$

Name: \_\_\_\_\_

ID: A

20.  $5x - 6 < -16$  or  $-13x < 26$

21.  $|-3x - 7| + 4 < 3$

22.  $\left| \frac{3}{8}x - 10 \right| < 0$

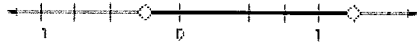
**Solve the equation algebraically.**

23.  $3 + |x - 3| = 7$

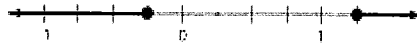
**Solve. Graph your solution.**

\_\_\_\_\_ 24.  $|4x - 2| < 3$

a.  $-\frac{1}{4} < x < \frac{5}{4}$



b.  $x \leq -\frac{1}{4}$  or  $x \geq \frac{5}{4}$



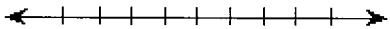
c.  $-\frac{1}{4} \leq x \leq \frac{5}{4}$



d.  $x < -\frac{1}{4}$  or  $x > \frac{5}{4}$



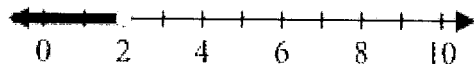
25. Sketch the graph of the solution of the inequality  $|x| - 2 > 2$ .



## Chapter 6 Practice Test

### Answer Section

1. ANS:  
 $p < 2$



BNK: 6.3 Solve Multi-Step Inequalities

2. ANS: B BNK: 6.3 Solve Multi-Step Inequalities

3. ANS:  
 $b \geq -11$

BNK: 6.3 Solve Multi-Step Inequalities

4. ANS: B BNK: 6.3 Solve Multi-Step Inequalities

5. ANS:  
 The restaurant's sales were greater than \$437,500:

$$18,500 + 0.04x > 36,000$$

$$0.04x > 36,000 - 18,500$$

$$0.04x > 17,500$$

$$x > \frac{17,500}{0.04}$$

$$x > 437,500$$

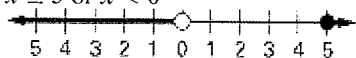
BNK: 6.3 Solve Multi-Step Inequalities

6. ANS:  
 $x > 1$  or  $x < -2$

Check graphs.

BNK: Ch. 6 Test, Level B

7. ANS:  
 $x \geq 5$  or  $x < 0$



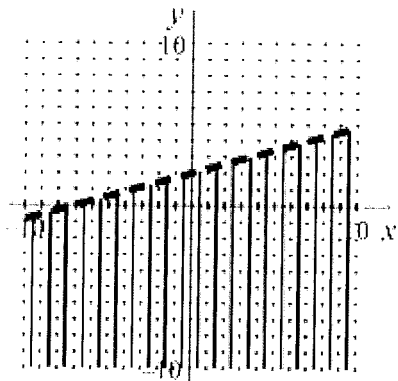
BNK: Ch. 6 Test, Level C

8. ANS:  
 $0.99x + 0.49y \leq 5$

BNK: Ch. 6 Test, Level B

9. ANS: B BNK: 6.7 Graph Linear Inequalities in Two Variables

10. ANS:

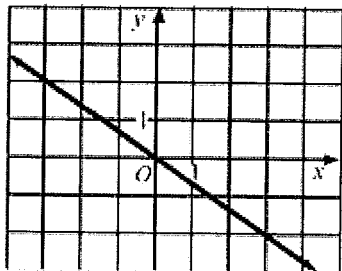


BNK: 6.7 Graph Linear Inequalities in Two Variables

11. ANS: D

BNK: 6.7 Graph Linear Inequalities in Two Variables

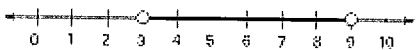
12. ANS:



BNK: 6.7 Graph Linear Inequalities in Two Variables

13. ANS:

$$3 < x < 9$$



BNK: 6.4 Solve Compound Inequalities

14. ANS: A

BNK: 6.4 Solve Compound Inequalities

15. ANS:

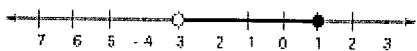
$$-4 < x \leq 2$$



BNK: 6.4 Solve Compound Inequalities

16. ANS:

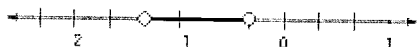
$$-3 < x \leq 1$$



BNK: 6.4 Solve Compound Inequalities

17. ANS:

$$-\frac{4}{3} < x < -\frac{1}{3}$$



BNK: 6.4 Solve Compound Inequalities

18. ANS:

$$x \geq \frac{7}{2}$$

BNK: 6.4 Solve Compound Inequalities

19. ANS:

All real numbers

BNK: 6.4 Solve Compound Inequalities

20. ANS:

All real numbers except  $-2$ 

BNK: 6.4 Solve Compound Inequalities

21. ANS:

no solutions

BNK: 6.5 Solve Absolute Value Equations

22. ANS:

no solutions

BNK: 6.5 Solve Absolute Value Equations

23. ANS:

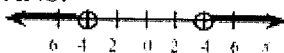
$$x = 7, x = -1$$

BNK: 6.5 Solve Absolute Value Equations

24. ANS: A

BNK: 6.6 Solve Absolute Value Inequalities

25. ANS:



BNK: 6.6 Solve Absolute Value Inequalities