Name: **Date:**
Instructor: **Section:**

Chapter 2 Test Form B

Solve each equation.

1. $2x-6=4x-8$ **1.** _____

2. $3(5x+6)=4(3x+5)+3x-2$ **2.** _____

3. $5(x-3)=4(x-4)$ **3.** _____

4. $11-5(3-x)=-2(x+3)+6x$ **4.** _____

5. $\frac{x}{2}-3=\frac{x}{3}-2$ **5.** _____

6. $\frac{3x-1}{4}+\frac{2(x-1)}{3}=\frac{4x-3}{12}$ **6.** _____

7. $3(x-2)-2x=x+5$ **7.** _____

8. $\left|\frac{4x+11}{3}\right|=1$ **8.** _____

9. $|7x-4|-4=-11$ **9.** _____

10. $|7n+1|=3|3(2n-2)+n|$ **10.** _____

11. $|4(1-x)|=|2(-x-3)|$ **11.** _____

Find the solution for each inequality. Write the answer in interval notation.

12. $8x-(5-x)>11x+1$ **12.** _____

13. $-7<x-(9-x)\le -3$ **13.** _____

14. $\left|\frac{2x-7}{3}\right|>1$ **14.** _____

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Chapter 2 Test Form B *cont'd*

15. $5(x-2) \geq -(x-2)$ **15.** _____

16. $\frac{x}{5} - \frac{7}{2} < -\frac{19}{5}$ **16.** _____

17. $5 - 2x > 8$ **17.** _____

18. $2(x-3) < 3(x+4)$ **18.** _____

19. $2 \leq 6x - 11 < 21$ **19.** _____

20. $2(3-x) < 4$ or $4x - 6 < -6$ **20.** _____

21. $7x - 8 \leq 17$ and $2x + 5 > -1$ **21.** _____

Solve.

22. Find 15% of 740. **22.** _____

23. The sum of two consecutive odd integers is 76. Find the two integers. **23.** _____

24. In 2007, a high school had 9750 students. In 2008, they had an 8% increase in students. How students did they have in 2008? **24.** _____

25. Solve $\frac{AC + 2BC}{B} = A + B$ for C. **25.** _____

Test 2 – B

1. 1
2. all real numbers
3. -1
4. -2
5. 6
6. $\frac{8}{13}$
7. Ø
8. $-\frac{7}{2}, -2$
9. Ø
10. $\frac{19}{14}, \frac{17}{28}$
11. $-\frac{1}{3}, 5$
12. $(-\infty, -3)$
13. $(1, 3]$
14. $(-\infty, 2) \cup (5, \infty)$
15. $[2, \infty)$
16. $\left(-\infty, -\frac{3}{2}\right)$
17. $\left(-\infty, -\frac{3}{2}\right)$
18. $(-18, \infty)$
19. $\left[\frac{13}{6}, \frac{16}{3}\right)$
20. $(-\infty, 0) \cup (1, \infty)$
21. $\left(-3, \frac{25}{7}\right]$
22. 111
23. 37, 39
24. 10,530
25. $C = \frac{AB + B^2}{A + 2B}$