Module 1 Test Review
Complete all work on lined paper.

Simplify each expression
1. $-4y + 3 - y - 7$
2. $\frac{1}{2}x - 8 + \frac{3}{2}x + 2$
3. $13y - 2x + 3y - 2$
4. $9m + 2 - m + m - 7$
5. $11x + 2 - 7 - 11m$

Simplify each express by using the distributive property.
6. $-3(x + 7)$
7. $2(x - 3)$
8. $-2(x - 5)$
9. $-8(-2x + 3)$
10. $-(x + 2)$

Factor each expression using the GCF
11. $18x + 9$
12. $2x - 12$
13. $13x - 39$
14. $14x + 7$
15. $45x + 15$

Solve each equation for x.
16. $3x = 27$
17. $-\frac{1}{2}x = 10$
18. $13 = \frac{x}{2}$
19. $x + 3 = 7$
20. $-8 + x = 15$
21. $2.5x + 3 = 7$
22. $\frac{3}{2}x - 2 = 13$

Write an equation to express each situation. Then solve. Check for reasonableness.
23. Gerry brought cupcakes to his party. Half way through the party, there were 8 less than half the cupcakes left. If there were 17 cupcakes left, how many did he bring to the party?
24. Andy had 270 toy soldiers. After he moved, he could only find 6 more than 1/3 of the toy soldiers. How many soldiers are left?
25. A pizza place charges $3 for delivery and $12 for each medium pizza. If Sue spent $63, how many pizzas did she order?

Answers.

1. $-5y - 4$
2. $2x - 6$
3. $16y - 2x - 2$
4. $9m - 5$
5. $11x - 11m - 5$
6. $-3x - 21$
7. $2x - 6$
8. $-2x + 10$
9. $16x - 24$
10. $-x - 2$
11. $9(2x - 1)$
12. $2(x - 6)$
13. $13(x - 3)$
14. $7(2x + 1)$
15. $15(3x + 1)$
16. $x = 9$
17. $x = -20$
18. $x = 26$
19. $x = 4$
20. $x = 23$
21. $x = 1.6$
22. $x = 10$
23. $\frac{1}{2}x - 8 = 17; 50\ cupcakes$
24. $3x + 6 = 270; 88\ toy\ soldiers$
25. $12x + 3 = 63; 5\ pizzas$