AGS 1 Name: _____ Period: _____ Date: _____

Assignment 5.1 – Solving Equations and Inequalities

Solve equation for the given variable, showing each step.

1. $x + 3 = 5$

2. $4x = 20$

3. $-8 + x = 7$

4. $\frac{x}{2} - 3 = 6$

5. $5 - x = 12$

6. $\frac{1}{3}x + 8 = 36$

7. $-4x + 6 = 34$

8. $\frac{3}{4}x + 7 = -2$

9. $9 + 4x = 19$

10. $7 - 5y = -43$

11. $-8 = 27 - 5x$

12. $\frac{2}{5}n + 6 = 10$

13. $2(x+4)=16$

14. $\frac{4x-5}{-9}=7$

15. $-\frac{4}{5}(4x-1)=28$

16. $2x+5x-5=9$

17. $35=-5+2x-7x$

18. $6x-2(x-5)=46$

Refresh your memory.

Simplify each expression using distributive property and combine like terms

19. $4a-(3a+2)+5$

20. $-4(3x-2)-(x+5)$

Substitute, then evaluate using $x=\frac{1}{2}, y=4, z=5$

21. $xy+z^2$

22. $4x+y-z$