

Completion and accuracy of this sheet is worth 50 points.

A. **Write** the steps to solve each of the following. You do not need to solve the equations, just **write** the steps to solve all of these type of equations not just these with these numbers.

Equation

Steps

1. $3n + 5 = 11$

2. $5 - 4x = 21$

3. $\frac{3}{2}x - 6 = 12$

4. $5x + 4 - 3x = 12$

5. $3(x + 5) = 45$

6. $6 - 7x = 4x - 12$

7. $3(x + 5) + 2x = 45$

8. $2(3x - 2) = 3(x - 4)$

9. $5 - 3(2x - 3) + 5x = 10$

10. $\frac{2x - 1}{x + 6} = \frac{2}{3}$

Now using what you know to solve equations, solve each of the following. SHOW ALL WORK.

11. $4m - 15 = -35$

12. $-23 = 5 - 7j$

13. $32 - 3y = 20$

14. $\frac{2}{3}k - 12 = -18$

15. $21 = 41 - \frac{5}{4}x$

16. $4m - 15 - 7m = -35$

17. $4(2x - 1) = -20$

18. $12 = -3(x - 2)$

19. $2(x - 8) - 10 = -50$

20. $36 = 5x - 3(3x - 4)$

21. $8d - 3 = 5d + 12$

22. $6y + 18 = 10y + 38$

23. $6 - 5b = 2b - 22$

24. $8y + 12 = 16 + 2y - 34$

25. $3(2x + 8) = 2(x - 12)$

26. $5(x - 2) - 2x = 2(3x + 2)$

27. $6(x + 4) + 12 = 3(4x - 1) + 27$

28. $3x - (x - 4) + 10 = 5 + 4(x - 2) - 7x$

29. $\frac{d}{11} = \frac{2}{3}$

30. $\frac{x - 2}{4} = -\frac{3x - 1}{3}$