Steps
- **Goal:** Get the variable by itself on one side of the equal sign
- Change Subtraction Signs to plus the opposite
- Distribute (multiply) the number outside the parenthesis to each number inside the parenthesis
- Combine like Terms (variables to variables, # to #)
- Move the variable and it’s number from the right side of the equal sign to the left of the equal sign by adding the opposite
- Combine the variables by adding their coefficients (# in front)
- Move the number that is added or subtracted to the variable by adding the opposite to both sides of the equation
- **Remember:** Whatever you do to one side you must also do to the other side
- Move the number that is multiplied or divided by the variable by doing the opposite operation
- **Remember:** We don’t change the sign of the number when we cancel with multiplication or division
- Check your work by plugging your final answer back into the original problem

Problems

1. \[3n + 8 = 2\]
   \[9n = -6\]
   \[n = -2\]

2. \[\frac{c}{2} = 6\]
   \[c = 12\]

3. \[12 - 4x = -12\]
   \[18 - 4x = -12\]
   \[x = 6\]

4. \[3x + 8 + x = 28\]
   \[4x + 8 = 28\]
   \[x = 5\]

5. \[17 + 3x - 11 = 0\]
   \[6x = -6\]
   \[x = -1\]

6. \[3(n - 2) = 12\]
   \[3n = 18\]
   \[n = 6\]

7. \[12(x + 3) - 3x = 117\]
   \[12x + 36 - 3x = 117\]
   \[9x = 81\]
   \[x = 9\]

8. \[5n + 2 = 3n + 6\]
   \[2n + 2 = 6\]
   \[n = 2\]

9. \[2(-4h - 13) = 37 + 13h\]
   \[-8h - 26 = 37 + 13h\]
   \[-21h = 63\]
   \[h = -3\]

10. \[3x + 6 = 3(x + x)\]
    \[3x + 6 = 6x\]
    \[-3x + 6 = 0\]
    \[x = 2\]

11. \[\frac{2}{x} + \frac{1}{x} = \frac{3}{x}\]
    \[\frac{3}{x} = \frac{3}{x}\]
    \[x = \frac{3}{1}\]

12. \[\frac{13}{16} + \frac{3}{16} = \frac{3}{16} + \frac{3}{16}\]
    \[\frac{3}{16} = \frac{3}{16}\]