$\qquad$
Mr. Tallman

## Do Now

## Solve and Check the following equations

1) $3 x+10+2 x=5$
2) $3-2 x+4 x+6=9$

## Lesson \#52-Solving Equations with the Distributive Property

Warm Up: Simplify the following expressions

| A) $6(2+4 x)$ | B) $2(4 x-8)-5(6+3 x)$ |
| :--- | :--- |

Example 1) Solve and Check: $2(4 x+3)=46$
Steps to solving an equation involving the distributive property:

| Steps | Example |
| :--- | :--- |
| 1) Use the distributive property where possible. |  |
| 2) Combine like terms if necessary |  |
| 3) Solve the resulting equation |  |
|  |  |
| 4) Check your solution. |  |

Example 3) Solve and Check: $3(x+4)=27$

## Now, You Try!

Solve and Check the following equations.

| 4) $3(x-2)=12$ | 5) $2(x+7)+x=20$ |
| :---: | :---: |
| 6) $5(x+2)=-5$ | 7) $10(x-4)=50$ |
| 8) $1 / 2(6 y+4)=2$ | 9) $1 / 4(16 n-12)=26$ |

