HOW to SOLVE ALGEBRAIC EQUATIONS

3(f +1) = 5f - 25 + 2f
3f + 3 = 5f - 25 + 2f
3f + 3 = 7f - 25

Simplify
1. **Distributive Property**
2. **Combine Like Terms**

Are all variables on 1 side of the equal sign?

YES → **Identify which side of the = sign the variable is on.**

NO → **Subtract 1 variable term from both sides to get all variables on 1 side of = sign.**

3f + 3 **- 3f** = 7f - 25 **- 3f**
3 = 4f - 25

Identify what has been DONE to the variable.

f has been multiplied by 4 and then 25 has been subtracted. (x4 then -25)

UNDO what has been done in reverse order GAMDEP

Undo Add & Subtract
Undo Multiply & Divide
Undo Exponents
Undo Grouping Symbols

****If undoing multiplication by a fraction...use multiplicative inverse. (Reciprocal)**

3 = **4f - 25**

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Cancelation Method

3 + **25** = 4f - 25 + **25**
28 = 4f
28 ÷ 4= 4f ÷ 4

7 = f

U-turn Method

3 = 4f - 25

f x 4 - 25

7 ÷ 4 +25

28

3