SOLVING EQUATIONS: PART 2

RECALL

In an **EQUATION** **…there is an _____ sign**

To **SOLVE** an Equation **…isolate the variable**

We can follow the steps below to solve equations

C	Clear fractions by multiplying all terms by a common denominator.
E	Expand using the distributive law to eliminate brackets
I	Isolate the variable on one side of the equation using opposite operations
D	Divide by the numerical coefficient attached to the variable

i) $\frac{2x+10}{3} = 20$

ii) $6x + 5 = 4x - 7$

ii) $\frac{x+3}{8} + \frac{x+1}{3} = 3$

iv) $3(x - 1) + 1 = 5(x - 2)$

EXAMPLES: Solve each of the following equations.

1. $x-4=12$

2. $5x+3=4x-12$

3. $2x-5=11$

4. $3x-11=5x+3$

5. $8x+13-3x=-26+2x$

6. $4(2x-3)+6=(7-6x)+5$

7. $\frac{r+5}{3}+5=-r$

8. $\mathbf{0.2v=0.6v+1.7}$

9. $4(3g-5)=-2(46+3g)$