

Flame Test (using a calculator)

Instructions: Solving a cubic equation using spreadsheets.

Step1: Enter a guess value in cell A3 printed in red. Its copy is seen in cell B3 (see previous flame test example).

Step2: click in cell B4 and enter the following formula

$$=(22.9*10^{(-7)}*B3^{(3)} - 23.14*10^{(-3)}*B3^2 + 987100)/165.3$$

Step3: Drag down the fill button (it is a black + found at right bottom corner of the B4).

Step4: The convergence to the solution occurs when values change no more.

Instructions: Solving a cubic equation using a calculator.

Step1: Enter any value say 2000 into the calculator.

check this value by pressing on the Ans button on the calculator.

Step2: Enter the following formula: $(22.9*10^{(-7)}*Ans^{(3)} - 23.14*10^{(-3)}*Ans^2 + 987100)/165.3$

Step3: keep pressing the = sign button until convergence.