Fairlight Method

Fairlight Tuition

Sevens

www.FairlightTuition.org

Tutorials

www.youtube.com/FairlightTuition

Method 1 [Sevens]

1. **Read** the longest one out loud, so you are seeing, saying and hearing.
2. **Repeat** until perfect.
3. **Write out** until perfect.
4. **Do next** the next longest one using the same system and including the first one learnt also.
5. **Complete** the entire Seven in this way, until it is perfect both verbally and also on paper.
6. **Learn Sevens** at least three times a day, morning, noon and night, for about 20 minutes each time. Do NOT do in one big lump. As with all information, ten minutes per day over six days is retained far better than an hour in one day. Exams test organisation and discipline.
7. **Revise** to previously learnt Sevens randomly (possibly using a dealt-card identification system). It is harder to start a plate spinning than keep it spinning.

Method 2 [Calculations]

1. **Parse** question (pencil).
2. **Root** equation (black pen). [Law or Principle mentioned where necessary.]
3. **Rearrange** root equation in terms of unknown.
4. **Substitute** values, using brackets where possible instead of multiplication signs.
5. **Calculate** answer to five significant figure and single underline (blue pen).
6. **Final answer** to appropriate significant figures (generally 2 or 3) and double underline (blue pen).
7. **SUQC** check (**S**ignificant figures; **U**nits; **Q**uestion answered; **C**ommon sense check).

Method 3 [Full Extraction]

1. **Test:** Do test/question under test conditions (UTC). Write in black pen, underline in blue (and sharp HB pencil for diagrams, graphs and parsing). Ideally only give yourself about 80% of allocated time to simulate exam-pressure drag. Switch to blue for answers (and black for underlining) for work done past time limit.

2. **Discuss:** Discuss answers in small group before reading mark scheme. Make any notes in a colour other than black, blue, red or green.

3. **Mark:** Swap papers within group and mark thoroughly, paying particular attention to the examiners' comments as a guide.

4. **Re-mark:** Swap papers and mark again.

5. **Analyse:** Argue about the marking and teach each other how to do questions where possible. Circle and annotate in green pen any parts of the questions or mark schemes/ examiners' comments that you still don't get.

6. **Correct:** Seek help from your teacher/tutor/peers/online to sort out the elements now highlighted in green.

7. **Consolidate:** Fully consolidate weak areas using day-week-month system, repeatedly re-attempting tricky questions until you can't get them wrong (rather than only just get them right).

Method 4 [Graphs]

1. **Quantities and Scales:** Check which variables are shown on the axes and what each scale division represents.

2. **Prefixes:** Check whether the variable quantities have any prefixes.

3. **Gradient:** Check whether the gradient of the line gives required quantity.

4. **Area:** Check whether the area between the line, the limits (state) and the x-axis (generally) gives required quantity [ALLX].

5. **Estimating Gradient Value:** Largest possible triangle with tangent as hypotenuse.

6. **Estimating Area Value:** (Value of one square) x (number of squares) ['part is half'].

7. **Value Lines:** Value lines drawn (dotted) and circled pullout values for *all* data taken from graph.

Method 5 [Experiment Questions]

1. **Variables:** Identify independent, dependent and control variables.

2. **Measurement [www]:** State **w**hat variables you will measure, ***w****ith* which instruments and ***w****hy* you need the values (either for plotting graph directly or calculation *then* plotting).

3. **Range and Increments:** State the range over which you will measure the independent variable and the magnitude (and hence number) of steps.

4. **Repeat and Average:** State that measurements will be repeated and averaged to reduce random error.

5. **Calculation:** State which measurements (if any) will be processed by calculation prior to plotting on graph (and describe the nature of the calculation).

6. **Graph:** State what graph you will plot (and that you will plot line of best fit).

7. **Conclusions:** State what conclusions you can draw from graph and how/why (usually by making investigated variable the gradient (ALERT: origin-to-point or tangential?) or y-intercept).