Name: **FOR ALL STUDENTS**	Date: 31 March 2021
Material: Feedback for March Practice Questions	Centre: **Overmugged**

General Comments

The practice questions for this month were well done! Many questions that are deemed slightly more challenging were attempted and executed well. However, many students make careless mistakes while attempting the questions so please spend some time to check through your work. For E-Math and A-Math, we want to secure as many marks as possible (due to the extremely steep bell-curve). There are some common conceptual errors as well so I will be listing them down below here for everyone to take note of!

Comments for the individual subjects

Subject	Comments
Elementary Mathematics	**Set Notation & Language** There was a typo in the original question. Please refer to my solutions for the updated question. For the work that I have marked, I based the answers off the non-updated question This question was quite badly done. This question is unorthodox and not commonly tested. However, it has appeared before hence why I decided to test students on this concept. Please always check whenever you complete your Venn Diagram that you have fulfilled all the conditions of the question. Many students disregard that there are overlaps in the activities where students can play multiple sports, hence why there is a difference in the numbers. Please refer to my solutions as to how to solve this part of the question! **Algebraic Expressions & Formulae** For part (d), many students rejected the negative solution. However, this is incorrect. Question is just asking you to solve the question. You will lose marks in an exam context as you have disregarded one of the solutions. Yes, in the context of the **WHOLE** question, the negative solution should be rejected. But in the context of part (d), we cannot reject as it does not fulfil the criterions of the question. **Trigonometry** For part (a)(iii), presentation for bearings was inaccurate. You need to include the $\mathbf{0}$ in front as bearings need to be in $\mathbf{3}$ digit answers if the final answer is only $\mathbf{2}$ **Properties of Circles** This is a chapter that always comes in examinations and many students struggle with it. Look for the common shapes (butterfly, arrow etc.…), and always remember all the different properties (angles in semicircle, alternate segment theorem etc…). Look out for special triangles (isosceles triangles when dealing with radiuses as any lines drawn from the centre of the circle to any point of the circumference of the circle is the radius)

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	<u>Properties of Circles (continued)</u> For part (b), in order to use the property "angle in the same segment", all 4 points of the butterfly need to be touching the circumference of the circle **<u>Angles, Triangles & Polygons</u>** For part (b), **AAA** is **NOT** a congruency test [common mistake] For part (b), for all congruency and similarity tests, reasons need to be given. You cannot state the equality without explaining why they are equal **<u>Algebraic Manipulation</u>** Careless mistake while manipulating. This is a very common mistake where students forget the effect of a negative sign when dealing with fractions. Always put brackets/braces when dealing with fractions $$\frac{x}{2}-\frac{3x-2}{4}=\frac{x}{2}-\left(\frac{3x-2}{4}\right)=\frac{2x-3x+2}{4}$$ **<u>Coordinate Geometry</u>** This question was badly done. Students are generally bad with Coordinate Geometry. Please do practice the concepts and questions, these kinds of questions are rather standard and always comes out in examinations **<u>General Careless Mistakes</u>** Missing units, Premature rounding, inaccurate rounding
Additional Mathematics	**<u>Logarithms</u>** For the second logarithm question, common conceptual error. When you want to remove the logarithms on both sides of the equation, you must ensure that both sides only have 1 logarithm term each. You then moved to use the incorrect property as shown below $$\log A-\log B\neq\log(A-B)$$ This is a very common mistake amongst students. Please remember that the correct property is as shown. Use this property to combine all the logarithms together $$\log A-\log B=\log\left(\frac{A}{B}\right)$$ **<u>Badly Done Questions</u>** Binomial Theorem, Trigonometry, Linear Law, Calculus

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