NAME……………………………..

Use the following table to assist you in seeing your strengths and weaknesses. Go through your exam, and place the number of points you earned for each problem in the box.

Please go online and work through each of the problems you missed. Submit this paper to me along with your MOCK EXAM by Monday, February 4th.

P1 NON- CALCULATOR SECTION

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Matrices | 11 | a.) You must be able to multiply 2x2 matrices by hand!  b.) better! | /6 |
| 2. composite functions and inverses. | 1 | a.) remember to simplify!  b.) ok  c.) some trouble with notation……I would re-write this as | /5 |
| 3. advanced trig, solving trig equations,  T3 | See ch. 10 | Factorization! (See solution) | /7 |
| 4. calculus  T7 | 16,17,18,19,20,21,22 | a.) ok  b.) the SLOPE (gradient) = 3, therefore set f ‘(x)=3 | /6 |
| 5. advanced trig | 8,9,10 | A general disaster….REVIEW! | /6 |
| 6. VECTORS  T5 | 12,13 | a.) Review vector equation of a line. I expect that EVERYONE should answer a.) correctly.    b.) please review | /8 |
| 7. quadratics | Ch. 6 | b2-4ac is GREATER than zero with 2 real roots.  Remember, k is a constant so (k2-4) is *c* in ax2+bx+c  You should also review how to solve an inequality. | /6 |
| 8. applications of trig functions, to particle physics using calculus | 19,20,21,22 | a.) cos(2x0)=cos(0)=1!  b. “show” work on this  c.) again sketches do not require graph paper, use intercepts, places where you know the slope is zero, negative, positive, etc, to help you sketch.  d.) If you have velocity, INTEGRATE to get displacement. If you have a velocity function, then DISTANCE is represented on a graph by the area under the curve. | /16 |
| 9. advanced vectors  T5 | 12,13 | a.) ok  b.) remember the DOT PRODUCT is zero when two lines are perpendicular  c. and d)……review | /14 |
| 10. functions, and advance calculus | 18,19,20,21,22, | a.) as it is written, use the QUOTIENT RULE. If you rewrite it as you must use PRODUCT RULE as multiplication is involved.  b. and c) difficult…please review. | /16 |
| TOTAL |  |  | 90 |

Other comments: ( things I did well, and things I still need to work on)

P2 CALCULATOR SECTION

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| --- | --- | --- | --- |
| Topic | Chapters in text | General comments | points |
| 1. Sequences and series  T1 | 2 | Generally good, small minor mistakes | /6 |
| 2. matrices  T4 | 11 | a) ok  b) Many missed, use GDC! Review matrix algebra rules for multiplying | /5 |
| 3. Functions, algebra and calculus.  Mostly T7 | 1, 16,17,18 | Remember “write down” requires little or no work. Review letter C on finding the normal curve. | /6 |
| 4. binomial expansion  T1 | 7 | Very few answered this problem correctly….please review binomial expansion! | /7 |
| 5. Circular functions and trig  T3 | 1, 5, 8,9,10  (Mostly ch. 10) | Please review the parameters a,b,c and d for trig functions. Remember to use your GDC when it will save time! | /6 |
| 6. Algebra, sequences and series  T1 | Mostly ch. 7 | a. review sigma notation  b. use SUM formula  c. Review infinite sums…..nearly everyone missed this problem | /7 |
| 7. trig functions  T3 and applications to calculus T7 | 10, 16, 17, 18,20 | a. Graph ok but be careful with max and mins, intercepts, etc.  b. Because multiplication is in volved….you MUST use the product rule when differentiating! | /7 |
| 8. Trig  T3 | 8,9,10 | a. Soh Cah Toa, ½(base)(height) only apply to RIGHT triangles. Use ½ absin(ø), sine rule, or cosine rule for ALL triangles.  b. rounding issues, use ½ absin(ø), for area.  c. Work in radians!  d. Remember to add the area of the triangle to the area of the sector  e. OK | /15 |
| 9. Algebra, functions, transformations, vectors, calculus  T1, 2, 5, 7 | Chapters 1,5,6,16,17,18,19,20,21,22 | a. SKETCHING does not require graph paper!  b. “write down”  c. OK but work on “showing” your work…..excessive writing is also not necessary.  d. “Write down”  e. LOTS OF PRACTICE HERE! | /15 |
| 10. Algebra, functions, transformations, vectors, calculus  T1, 2, 5, 7 | Chapters 1,5,6,16,17,18,19,20,21,22 | Ai) ok  Aii) ok  Aiii) many missed! Set the second derivative equal to zero!  b.) ok  ci) ok  cii) funny question….mostly ½ for reasoning marks here. | /15 |
| TOTAL |  |  | /89 |

Other comments: (things I did well, and things I still need to work on)