**Subsidiary Mathematics Home Package for S4 PCB.**

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| **N0** | **Questions** |
| 1. | Convert the following degree measures to radians, in terms of .   1. 900  b) 2250 c) 3150 d) 360 |
| 2. | Convert the following radian measures to degrees.   1. b) c) d) e) |
| 3. | Solve in the set of real numbers. |
| 4. | In this question angles are from 00 to 3600 and answers should be given to the nearest degree.   1. b) c) d) |
| 5. | Prove the following trigonometric identity |
| 6. | If and lies in the second quadrant, without using find the value of . |
| 7. | Rationalize the numerator and simplify.  a) b) |
| 8. | Graph the function |
| 9. | Jalisa invests 5,000,000 Rwf at a bank offering 5% compounded quarterly. Find the amount of the investment t at the end of 10 years (if untouched). |
| 10. | Solve triangle ABC i. a=3cm, b=4cm, ∠𝐶 = 53°  ii. a=20cm, b=25cm, c=22cm  iii. a=65cm, c=50cm, ∠𝐶 = 52°  iv. ∠A=50° ∠B=68° C=230  v. ∠A=30°, ∠C=65°, b=10m  vi. a=30, c=40, ∠A=37° |
| 11. | Express each of the following as a logarithm |
| 12. | Simplify by writing each of the following as a single logarithm or write as integer. |
| 13. | Simplify using without a calculator:   1. b) c) |
| 14. | Show that  a) |
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