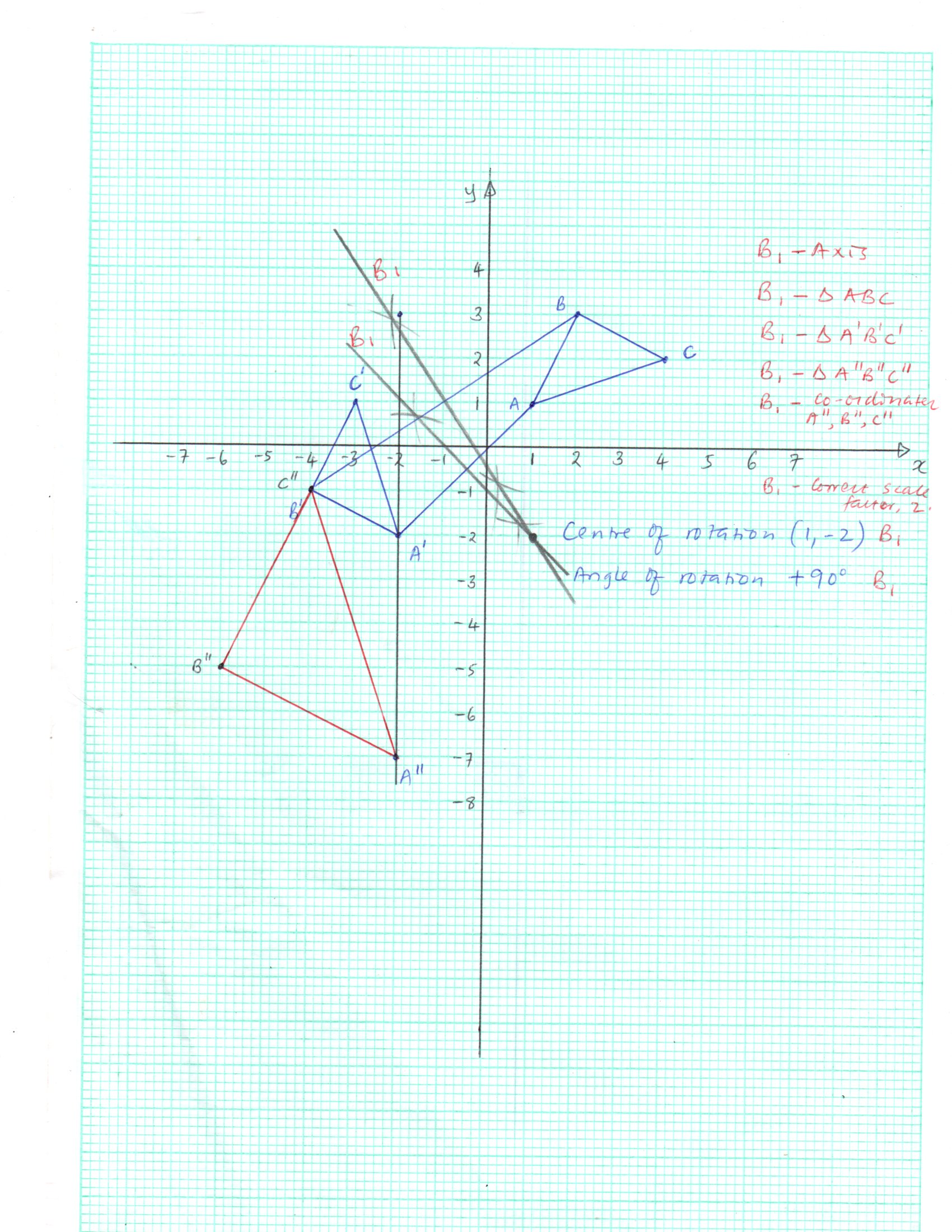
**MATHEMATICS FORM TWO**

**MARKING SCHEME**

|  |  |  |  |
| --- | --- | --- | --- |
| **NO** | **WORKING** | **MARKS** | **REMARKS** |
| 1 | Numerator  Denominator | M1  M1  A1 | Numerator  Denominator |
| 2 | 4x2 = 3 (4x - 3)  4x2 = 12x – 9  4x2 = 12x + 9 = 0  (2x - 3) (2x - 3) = 0  x = 1.5 | M1  M1  A1 |  |
| 3 |  | M 1  M 1  A 1 |  |
| 4 | Let x be sides of the square  5.7 (1dp) | M1  M1  A1 |  |
| 5 | = =9  Area = +  = 108 + 162  = 270 | B1  M1  A1 |  |
| 6 | |  |  | | --- | --- | | **No** | **Log** | | 4.684 | 0.6706 | | 2.497 | 0.3975 + | |  | 1.0681 | |  |  | |  |  | |  |  |   0.8496 | M 1  M 1  M 1  A 1 | All correct logs  Correct addition of logs  Correct division  Accurate answer |
| 7 | M1 =2  M2 =2 | B1  M1  A1 |  |
| 8 |  | **m1**  **m1**  **a1** |  |
| 9 | C:\Users\USER\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\IMG_20190622_010653.jpg | B 1  B 1  B 1 | Complete diagram  Lines AB and BC |
| 10 |  | M1  M1  A1 |  |
| 11 | = 5.5cm | M1  M1  A1 |  |
| 12 | and | M 1  M 1  A 1 |  |
| 13 |  | B1  B1  M1  A1 |  |
| 14 |  | B1  B1  B1 | For North line at may be simplified  ✓location of R  ✓for 700km ± 10km |
| 15 | Factorise numerator  Factorise denominator  Thus | M 1  M 1  A 1 |  |
| 16 | 360-60 =  11.55 | M1  M1  A1 |  |
| 17 | (a) Total sales = sh.360 ×500  = sh.180,000  Commission = sh(180,000 – 100,000)×2/3  =sh.1600  Total earnings = sh.(12,000 + 1600)  =13600   1. (i) New salary=sh.(12000 + 2000×10/100)   =sh. 13200  Commission paid  = sh(17,600– 13,200)  =sh.4400  Commission is paid on sh.4400 × 100/2  = 220,000  Total sales = sh.220,000 + 100,000  =320,000/=      =640 | M1  M1  A1  M1  M1  M1  A1  B1  M1  A1 | Follow thro |

18.



|  |  |  |  |
| --- | --- | --- | --- |
| 19 | 1. 385     b )    1 000 000kg/   1. Vol of cylinder = 385   Vol of cuboids  b =  = 3.102 | M1  M1 A1  M1  A1  M1  M1  M1  M1  A1 |  |
| 20 | 1. =     D C  10.5 h 10.5  80  A T x B    Area of AXYBCD     1. Area of the shaded part   = 396.58-154  = 88.58 cm2 | M1  A1  B1  B1  M1  A1  M1  A1  M1  A1 |  |
| 21 | 1. i. V      1. Volume of marble (sphere) = 2. Surface area = | M 1  A 1  M 1  A 1  M 1  M 1  A 1  M 1  A 1 |  |