**MARKING SCHEME F2**

**ANESTAR**

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| **No** | **Calculation**  | **Marks**  |
| 1 | Numerator-8÷2+12x9-4x6BODMAS-8x2= - 4-4+12x9 – 4 x612+9=1084x6=24-4+108-24=80Denominator(BODMAS)56÷7x256÷7=88x2=1680/16=5 | M1M1A1 |
| 2 | Prime 1 – 10 =2357Square No = - 1 – 10=9412357 – 941=1416 | M1M1A1 |
| 3 | 1. 100500

2 5250 2 2625 5 525 5 105 5 21 3 7 7 122 x 31x53x711. 21x32x72=882

P=882 | M1M1A1 |
| 4 |  1764 2744  2 882 2 1372 2 441 2 686 3 147 2 343  3 49 7 49 7 7 7 7 7 1 7 1 $\sqrt{2^{2}x3^{2}x7^{2}}$ $\sqrt[3]{2^{3}x7^{3}}$ =2x3x7x7 =2x7 2 x 3 x 7 2 x 7 =3 | M1M1A1 |
| 5 | 5s+3b=1750x13s+1b=850x35s+3b=17509s+3b=2550 --4s = - 800-4s= -800-4 -4Shirts=2003(200) + b=850b=850 – 600skirts=250 | M1M1A1 |
| 6 | Exterior angle + interior angle=180°156 + Exterior angle=180°Exterior angle = 180° - 156°=24°N=360/24=15sides | M1M1A1 |
| 7 | Sum of interior angles of an Octagon=(2n – 4)90=(2 x 8 – 4)90=10802x+$\frac{1}{2}x$+x+40+110+135+160+2x+10+185=10805$\frac{1}{2}x$ + 640=10805$\frac{1}{2}x$=1080 – 6405$\frac{1}{2}x=440$5$\frac{1}{2}$ 5$\frac{1}{2}$ x=80 | M1M1A1 |
| 8 | $$\frac{3}{0.216}+ \frac{10}{2.76}$$$\frac{3}{2.76x10^{-1}}$ + $\frac{10}{2.76x10^{0}}$3(0.3623x101) + 10(0.3623)=10.869 + 3.623 = 14.492 | M1M1A1 |
| 9 | 1948 – 750=1198 – 990 = 208208 +560 = 768 x8=sh.6144 | M1M1A1 |
| 10 | Find the GCD 2 48 60 2 24 30 3 12 15 4 52x2x3=12cmx=12cmarea=12cm x 12cm =144cm2 | M1M1A1 |
| 11 | x+y – 2= -1x – 2y + z=-7-2+y – z= -1-2 – 2y + z= -7Y – z=1-2y+z=-5 +-y = -4-y= -4Y=44 – z= -1Yz=x3Z=3 | M1M1A1 |
| 12 | **SECTION (II)****C:\Users\JOHN MATHENGE\Documents\a.jpg**Distance P=900 x $\frac{40}{60}$ = 600kmQ=750 x $\frac{40}{60}$ = 500km b)10.7 (+/-0.1) x 100 1070 (+/-10km)1. I) 574°W

II) 074° | B4B2M1M1M1M1 |
| 13 | 1. =$\frac{1}{2}bh$

$\frac{1}{2}$x6x4=12cm21. DC2=102 - 62

$\sqrt{DC^{2}}$ = $\sqrt{10^{2}x6^{2}}$ $DC$=8$$\frac{1}{2}\left(4+8\right)6$$$$\frac{1}{2}x12x6$$=36cm21. $\frac{1}{2}x6xb=25$

$6b=50$6 6B=8$\frac{1}{3}$cm | M1M1M1M1M1M1M1M1M1M1 |
| 14 | 1. i) $\frac{30}{100} x 86400$

=25920ii) $\frac{112 000}{16 000} : \frac{128 000}{16 000}$ = 7 : 8iii) $\frac{40}{100} x 86, 400$= 34, 5601. Nzau = $\frac{7}{15} x 25920+12960=25056$

Masee= $\frac{8}{15} x 25920+12960=26784$ | M1A1M1M1A1M1A1M1M1A1 |
| 15 | 1. (8.457 x102)2

71.52 x 104  = 7152001. $\sqrt{45.667x10^{2}}$

=6.7580 x 101=67.581. i) 25000 + 15000 + 34000 = 74000

ii) $\frac{150000-74000}{2}$  =38000 | M1A1M1M1A1M1A1M1M1A1 |
| 16 | 1. C:\Users\JOHN MATHENGE\Documents\a.jpg

Area A = $\frac{1}{2} x 220 x 160=17600m$2 B=$\frac{(100+160)}{2}X20=2600m$2 C=$\frac{(100+120)}{2}X60=13200m$2 D=$\frac{1}{2} x 100 x 120=6000m$2 E=$\frac{1}{2} x 60 x 60=1800m$2 F=$\frac{(60+100)}{2}X200=32000m$2 G=$\frac{(100+120)}{2}X60=6600m$2 H=$\frac{1}{2} x 120 x 80=4800m$2Total area=84600m2$\frac{84600}{10000}$ = 8.468.46 x80000 = sh. 67800 | B5B5 |