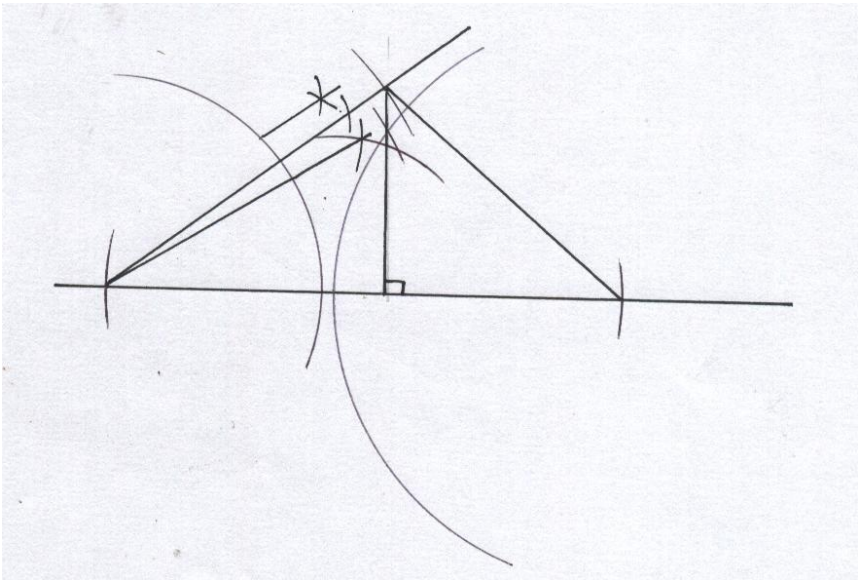
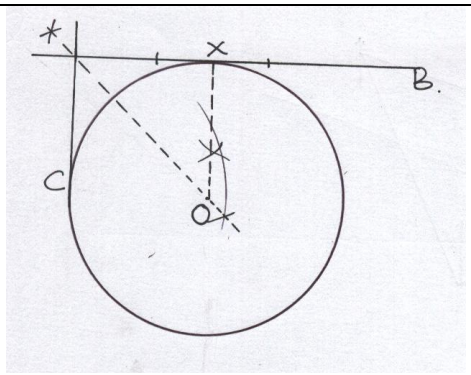
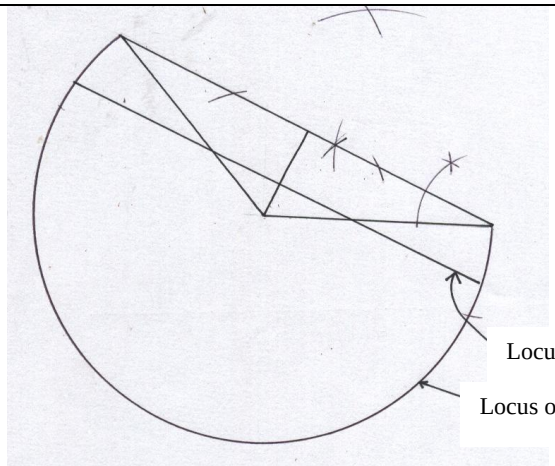
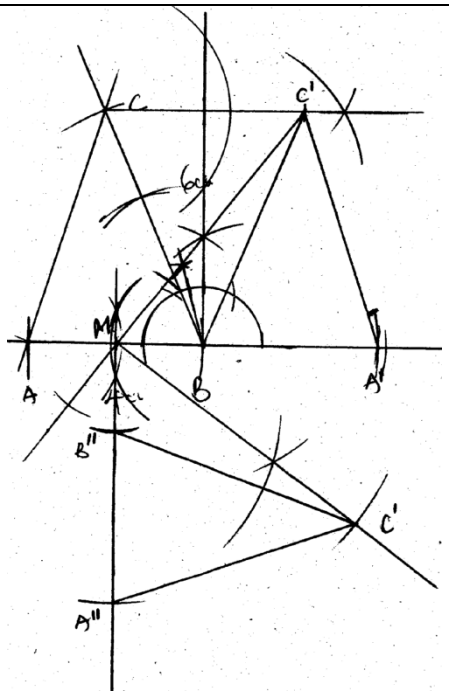
2. Geometrical constructions

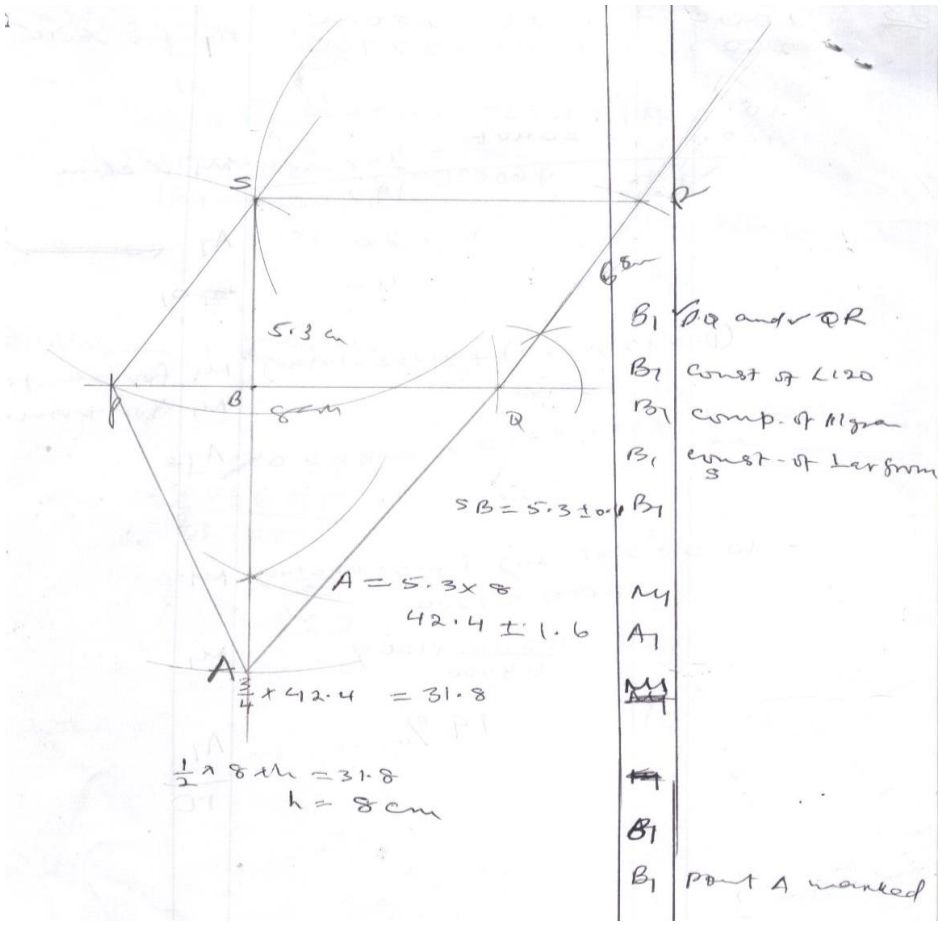
1		B_1	✓conct 30^0
		B_1	✓conct 15^0
		B_1	✓AB 9cm
		B_1	✓AC 6cm
		B_1	✓ΔABC
		B_1	✓CD
		M_1	
		A_1	
	$CD = 3.7cm \pm 0.1$	B_1	Loci of E
	Area of $\Delta ABC = \frac{1}{2} \times 9 \times 3.7cm$	B_1	For AE
	$= 16.65cm^2$ AE=		

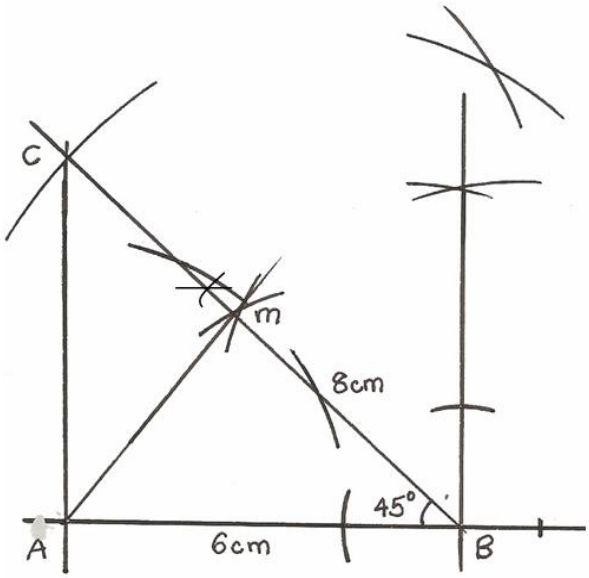
2		B_1	✓construction of 90^0at x
		B_1	✓bisection of line XC and location of centre O
		B_1	✓circle drawn
		3	
3		B1	✓length AB = 5.4cm
		B1	
		B1	✓construction of 300 at B
		B1	
		B1	✓location of C and ABC △
		B1	✓length of BC stated
		B1	
		B1	✓identification of A as centre
		B1	

BC = 9.4cm (± 0.1)
AD = 2.7cm (± 0.1)

		B1	✓Locus of P drawn. (Bo if circle completed) ✓dropping of perpendicular ✓length AD stated ✓his height ✓locus of Q drawn
		10	
4.		B1 B1 B1 B1 B1 B1 B1 B1 B1	<67½0 constructed ABC complete AC = 5.7 ±0.1 C1Drawn A1Drawn A1BC1 completed Locating M (midpoint M of AB) B11 and A11 rotated C1 rotated A11B11C11 completed
		10	

6.



7.	 AM = 4.2cm, AC = 5.6cm (±0.1cm)	B1 B1 B1	Construction of 45^o ΔABC ⊥ dropped from A to BC
		04	

9. (a) $\tan 60^0 = \frac{AC}{5cm}$ M1

AC = 8.6605CM A1

(b) A = ½ x 5 x 8.6605 M1

A = 21.65125 A1

(b) $^{60}/_{360}$ x πr^2

$^{60}/_{360}$ x 3.142 x 25 M1

= 13.091cm^2 A1

(d) Area of shaded part

Δ COA = Δ OBA, sector OCD = OCB

21.65 x 2 = 43.3025cm^2 M1

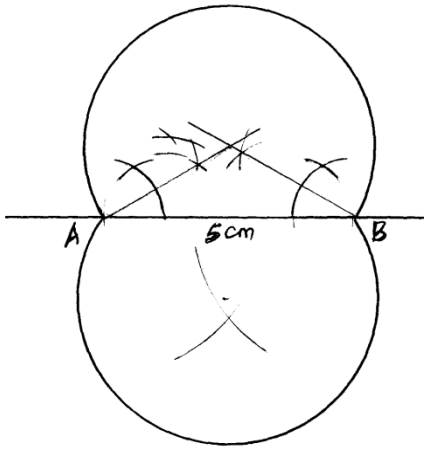
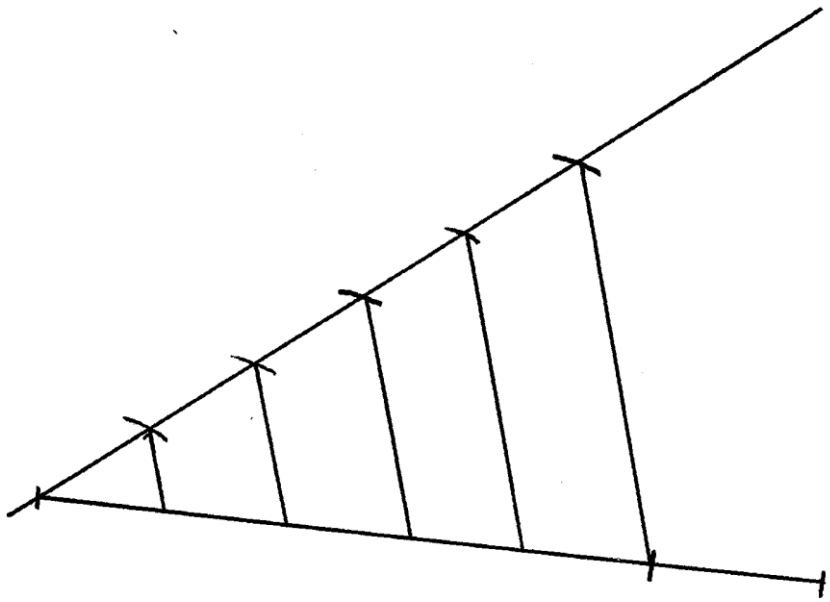
13.091 x 2 = 26.182cm^2 M1

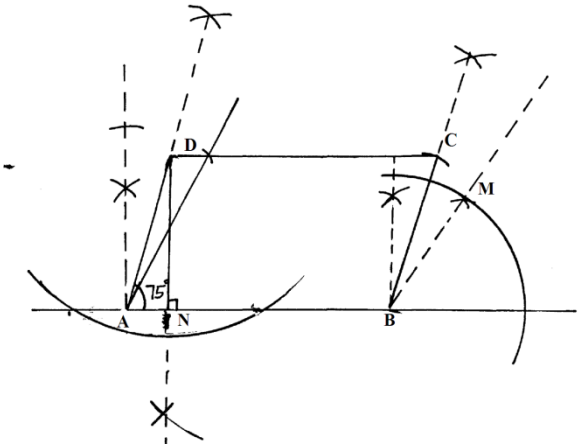
$\therefore$ Area of shaded part

43.3025 – 26.182 M1

= 17.11225cm^2 A1

10

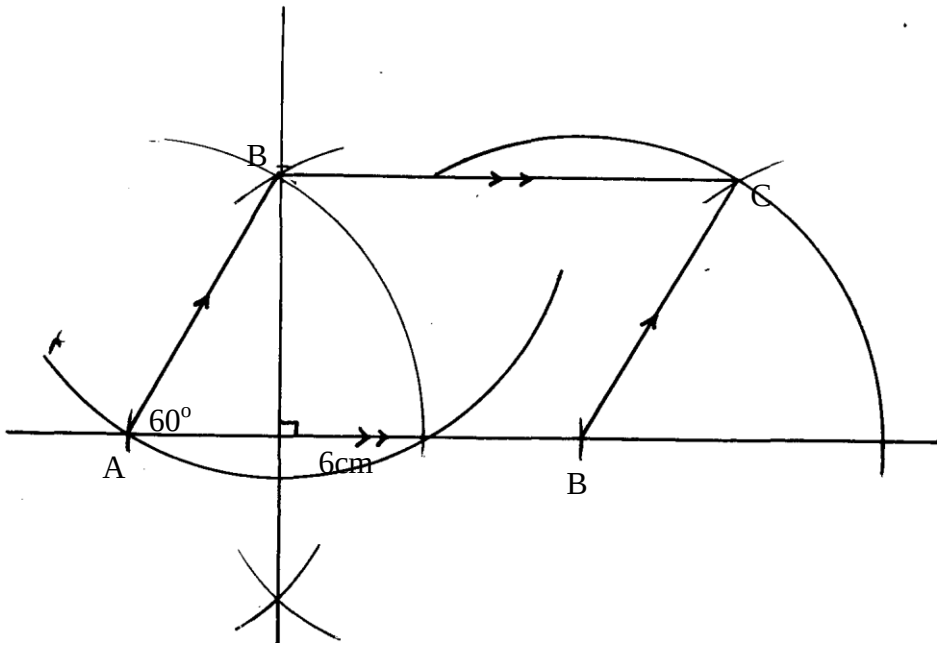
10.	 Constant angle locus	B1 B1 B1 B1	Const of 30^0 at A Const. of 30^0 at B For one arc constructed For lower arc constructed.
11.		**B1** **B1** **B1**	A line drawn slunt to touch the given line at one end. Subdivided to 5 equal Sections Parallel lines drawn from slunt line to touch the given line .All complete
		03	

12.	 a) length of ON = 3.9cm b) Area = 6x3.9 = 23.4cm^2	B1 B1 B1 B1 B1 B1 B1 B1 B1 A1	Both 90^0 & 60^0at A 75^0 at A 90^0&60^0 at B 75^0 drawn at point B Both AB=6cm and BC = 4cm Parallelogram completed ⊥ drawn
		10	

13. $A = 120000\ (\ 1 + {}^{8}/_{100} \times ¼\ )^3$

$120000\ (1.02)^3 \qquad = 127344.95$

14.

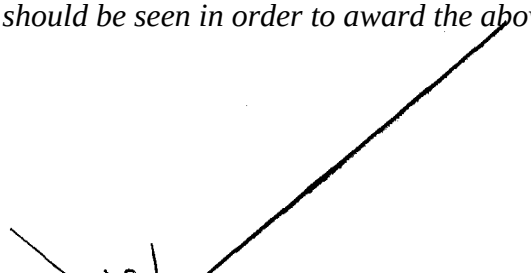


15. *BC = 3.5 cm ± 0.1* B_1

B1 construction of ∠CAB.

B1 completion of triangle.

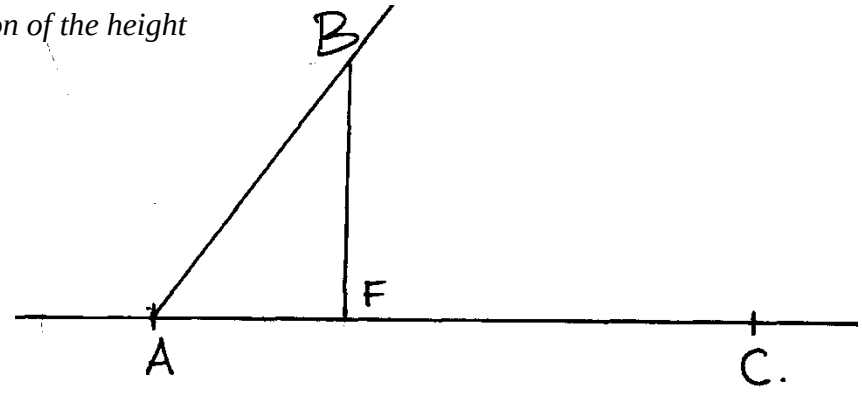
N/B/ Arcs should be seen in order to award the above marks.



16. *Height = ± 8.7 1cm*
(½ x 7 x 8.7) 30.45cm^2
2 ±1cm

17. *Give 1m of correct and complete triangle*
Correct angle
Correct construction of the height

18.



19. *Marked price = $\frac{100}{90}$ x 450 = shs.500*

Cost = $\frac{100}{25}$ x 450 = shs.360

Profit = 500 – 360
= shs. 140