

Checked ✓
FORM ONE MATHS. END OF TERM 2 EXAM ✓
NAME: _____ ADM No _____

Attempt all questions in this paper.

① Find the greatest number which when divided by 181 and 236 leave a remainder of 5 in each case (3mks)

② Find the LCM of each of the following (4mks)
34, 170, 42.

③ Fill in the boxes (2mks)

(i) $\square - (-2) = -1$

(ii) $(+1) - (+3) - \square = -5$

④ find the value of the unknown

(i) $-2247 \div x = 321$ (2mks)

(ii) $-4860 \div x = -81$ (2mks)

⑤ Express each of the following recurring decimals as fraction. (2mks each)

(i) $4.\dot{3}\dot{7}$

(ii) $0.\dot{3}1\dot{4}$

⑥ Evaluate correct to 5 decimal places (4mks)

$$\frac{0.17 \times 1.05 \times 0.32}{4.5 \times 0.08 \times 0.089}$$

⑦ Use tables to find the square of each of the following (2mks each)

(i) 0.0001465

(ii) 896.2465

(iii) 8.2966

7 use tables to find the square roots of the following (2 mks each)

(i) 0.001957

(ii) $684,782$

(iii) 0.02486

88 George is ten years older than his brother Sam.
Find an expression for
(a) the sum of their ages (1 mks)

(b) the sum of their ages 8 years time (2 mks)

(c) the product of their ages five years ago. (2 mks)

9 Simplify (3 mks)

$$\frac{3x}{2} - \frac{5y}{6} + \frac{y}{4}$$

10 Express as a single fraction in its simplest form. (4 marks)

$$\frac{4p^3r}{2pr-3r^2p} - \frac{2r^2p}{2pr-3r^2p}$$

(4 marks)

11 Simplify by use of common factors. (4 marks)

$$\frac{(x+1)(ax-a+bx-b)}{(1-x)(ax+bx-a-b)}$$

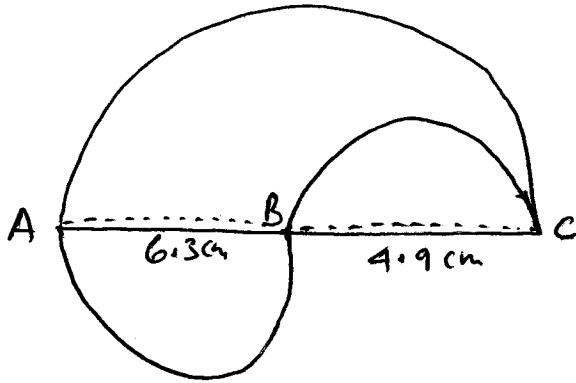
12 Find the value of x which makes the following ratios equal. (2 marks)

$$3/7 : 6 = 7 : x$$

13 Fifteen tractors each working 8 hrs a day take eight days to plough a piece of land. How long would it take 24 tractors each working 10 hrs a day to plough the same piece of land. (4 marks)

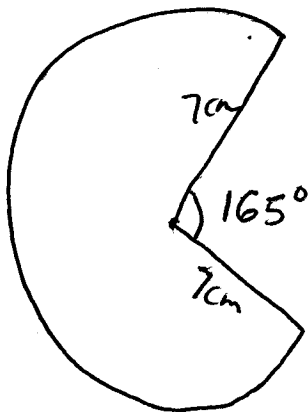
14) Find the perimeter of the figure given below
(5mks)

(a)



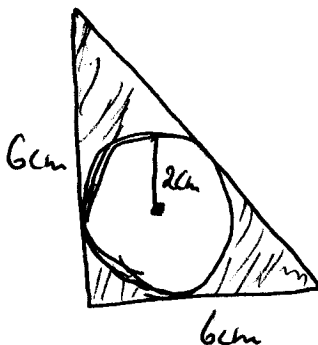
(b)

(4mks)



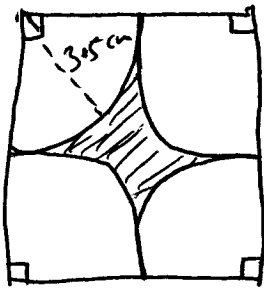
15) Find the area of the shaded regions in the figure below. (3mks.)

(a)



(b)

(2 marks)



16) 2000 cm^3 of a mixture consists of 2.5 kg of substance A and 7.5 kg of substance B. Find the density of the mixture in g/cm^3 (3 marks)

17) The table below represents bus fares in shillings between towns A and E via B, C and D.

A				
20	B			
25	10	C		
40	35	30	D	
50	40	35	10	E

Use the table to answer the following questions.

(a) A trader travelled from town A to town E. How much did he pay as bus fare? (2 marks)

(b) If the trader decided to alight at town D and afterwards proceed to town E, how much would he have paid? (2 marks)

18) Express in g/cm^3 (2 mks each)

(i) $13 kg/m^3$

(ii) $11,500 kg/m^3$

19) A floor is covered by 1800 rectangular tiles each measuring 20cm by 15cm, find the total area of the floor in m^2 (3 mks)

20) Express the following to 4, 3, 2 and 1 s.f.

	1.S.F.	2 SF	3 SF	4 SF
(a) 341.0032				
(b) 0.1072				
(c) 0.03475				

12 mks