## O'LEVEL MTCS REV QNS

1. Given that $A=\{1,3,5,7,9\}$ and $B=\{2,3,4,5,7\}$

Draw a Venn diagram and use it to find;
i) $\quad \mathrm{AnB}$
ii) AuB
iii) $\quad A^{1}$
2. Workout $13^{1 / 5}-1^{5 / 6}$
3. Find the gradient of the line passing through the points.
$A(3,1)$ and $B(8,6)$
4. Share 200 mangoes in the ratio of $2: 5$
5. Complete the sequence below;
i) $2,4,6,8, \ldots,-$,
ii) $3,6,12,24,-,-$,
6. Find the L.C.M of 36 and 12
7. Find the radius of the circle whose circumference is 62.8 .
8. If $y=4-2 x$, find the value of $y$ when
i) $\quad x=-4$
ii) $\quad x=3$
9. Construct an angle of $75^{\circ}$ using a ruler, pencil and protractor only.
10. Convert 0.222 $\qquad$ .to a fraction.
11. a) Using a ruler, pencil and pair of compasses, construct a triangle $A B C$ such that $\overline{A B}=6 \mathrm{~cm}$ angle $A \hat{B} C=60^{\circ}$ and $B A \hat{C}=30^{\circ}$.
b) Measure lines $\bar{B} \bar{C}$ and $\bar{A} \bar{C}$
c) Construct an inscribed circle on a triangle
d) Find the area of the circle
12. By first drawing a table;
a) Draw a graph of the equation $y=2 x+1$ for value of $x$ from -2 to 6
b) Show that the graph above is 2 . (Choose any two points from the graph)
13. a)


S P In the diagram above find the values of $a, y, z$ and $Q$
b) Christine bought $\frac{1}{2} \mathrm{~kg}$ of rice at 1000/= per $\mathrm{kg}, \frac{3}{4} \mathrm{~kg}$ of beans at $4000 /=$ per kg and $\frac{3}{4} \mathrm{~kg}$ of cooking oil at 2000/= Itr. How much money has he spent?

