

NO19

$$A = P \left(1 + \frac{RT}{100} \right)$$

$$A = 25,000 \left(1 + \frac{21 \times 3}{100} \right)$$

$$A = 25,000 (1 + 0.63)$$

$$A = 25,000 (1.65)$$

$$A = \$40,750$$

$$\frac{\$40,750}{2} = 20,375$$

He pays \$20,375.00 each year

(16)

Let y and $(y+1)$ be the consecutive numbers

$$3y + 2(y+1) = 17$$

$$3y + 2y + 2 = 17$$

$$5y + 2 = 17$$

$$5y = 17 - 2$$

$$y = \frac{15}{5} = 3 //$$

$$\therefore y+1 = 3+1 = 4$$

$$\frac{y}{y+1} \times 100 = \frac{3}{4} \times \frac{100}{1} = 75\%$$

MS 2

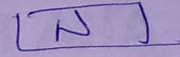
15:00 am



$v_1 = 72 \text{ km/hr}$

distance \longrightarrow

$v_2 = 40 \text{ km/hr}$



time taken, t

time taken to reach N if $t_1 = \frac{d \text{ km}}{72}$

time taken to reach M if $t_2 = \frac{d \text{ km}}{40}$

Total time spent, $= \frac{d \text{ km}}{72} + \frac{d \text{ km}}{40} + 2 = 3 \text{ hr } 55 \text{ minutes}$

$\frac{d}{72} + \frac{d}{40} + 2 = 3 \frac{55}{60}$

$\frac{d}{72} + \frac{d}{40} = 1 \frac{55}{60}$

$\frac{d}{72} + \frac{d}{40} = \frac{115}{60}$

Multiply through by 360

$5d + 9(d + 2) = 6(115)$

$5d + 9d + 18 = 690$

$14d + 18 = 690$

$14d = 672$

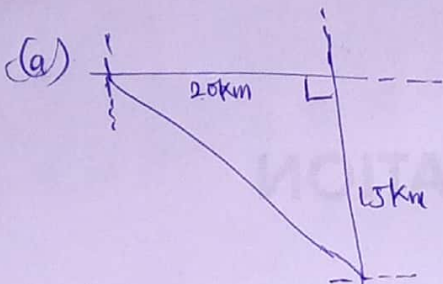
$d = \frac{672}{14} = 48$

Distance from M to N = 48 km

rain of Your Word of wisdom, thereby attaining great multitudes into this Church all through this prophetic season - Act. 6:7
25. Father, let this Church continue to experience the power of the Holy Spirit, thereby retaining her as an

be my year
of all
27
onward

QUESTION 3



Using Pythagoras theorem

$$\begin{aligned} |YZ| &= \sqrt{15^2 + 20^2} \\ &= \sqrt{225 + 400} \\ &= \sqrt{625} \\ &= \underline{25 \text{ km}} \end{aligned}$$

$$(b) \theta = \tan^{-1}\left(\frac{15}{20}\right) = \tan^{-1}(0.75) = 36.87^\circ$$

$$\begin{aligned} \text{Bearing at } Y \text{ from } Z &= 90 + \theta = 90 + 36.87^\circ \\ &= 126.87^\circ \quad \underline{\underline{= 127^\circ}} \end{aligned}$$

QUESTION 4

(a) $\hat{A}BP = 90^\circ$ (angle in a semi-circle)

$$\hat{A}BP + \hat{O}AB + \hat{A}DB = 180^\circ \text{ (sum of angles in a } \triangle)$$

$$90 + 34 + \hat{A}DB = 180^\circ$$

$$\begin{aligned} \hat{A}DB &= 180 - (90 + 34) \\ &= 56^\circ \end{aligned}$$

$$\hat{O}DB = \hat{A}DB = 56^\circ \text{ (base } \angle \text{ s of an isosceles } \triangle ODB)$$

(b) Assuming \overline{BC} as a tangent

$$\hat{O}BC = 90^\circ \text{ (radius } \perp \text{ to tangent)}$$

$$\hat{B}OD = 2 \times \hat{O}AB = 2 \times 34 = 68^\circ \text{ (twice } \angle \text{ at centre } \angle \text{ at the circumference)}$$

$$\hat{O}CB = 180^\circ - (\hat{O}BC + \hat{B}OD) \text{ (sum of } \angle \text{ s in } \triangle)$$

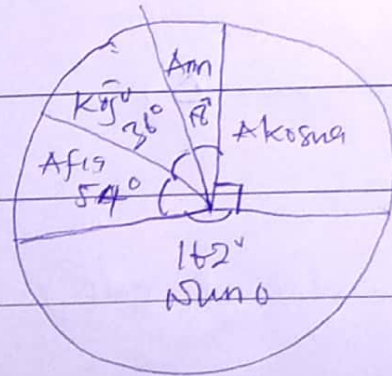
$$= 180^\circ - (90 + 68)$$

$$= 180^\circ - 158^\circ$$

$$= \underline{\underline{22^\circ}}$$

QUESTION 5

Child's Name	Percentage share	Sectoral share	
Am	5	$\frac{5 \times 360}{100}$	$= 18^\circ$
Afia	15	$\frac{15 \times 360}{100}$	$= 54^\circ$
Kojo	10	$\frac{10 \times 360}{100}$	$= 36^\circ$
Nana	45	$\frac{45 \times 360}{100}$	$= 162^\circ$
Akosua	25	$\frac{25 \times 360}{100}$	$= 90^\circ$
	100		



(MOSb)

Prob (red) = $\frac{5}{12}$

Prob (two reds) = $\frac{5}{12} \times \frac{4}{11} = \frac{20}{132} = \frac{5}{33}$

"To Make a Difference and Secure the Future"

NO 2

UDO-AKA

DATION

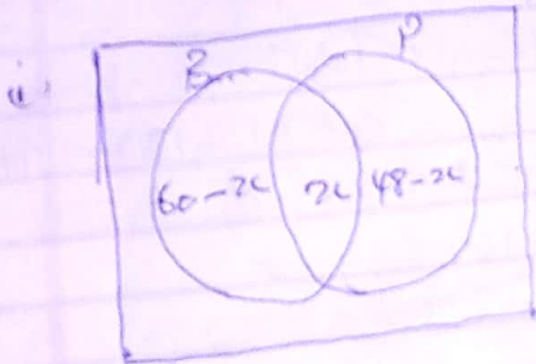
QUESTIONS

(i) Total no in class = 80

No Study biology = $\frac{3}{4} \times 80 = 60$

No Study physics = $\frac{2}{5} \times 80 = 48$

$U = 80$



Let those who study both be x

$$\begin{aligned} \text{ii) } 60 - x + x + 48 - x &= 80 \\ 108 - x &= 80 \\ x &= 108 - 80 = 28 \end{aligned}$$

$$\begin{aligned} \text{iii) fraction which study only biology} &= \frac{60 - x}{80} = \frac{60 - 28}{80} \\ &= \frac{32}{80} = \frac{2}{5} \end{aligned}$$

$$\frac{44}{12} \times \frac{11}{11} = \frac{20}{132} = \frac{5}{33}$$

"To Make a Difference and Secure the Future"

Child's Name	Percentage	Share
		5 x 360

QUESTION 6B

1 square metre cost GH¢ 890.00

(5 x 8) square metres cost GH¢ 890 x 5 x 8
 = GH¢ 156,800.00

Cost of painting = Total cost at carpeting
 = ~~GH¢ 216,120~~ - ~~GH¢ 106,800~~
 = GH¢ 216,120 - GH¢ 156,800
 = GH¢ 109,320.00