



विभाग- A 1-16 - हरेक नो '1' गुण B

1) $[16]^{3/4}$
 $= [2^4]^{3/4}$
 $= 2^3$
 $= 8$

8) सजायतु
 क्षेत्रफल = पाथो x सजायतु वये

9) $\frac{9\sqrt{7}}{\sqrt{63}}$
 $= \frac{9\sqrt{7}}{3\sqrt{7}}$

2) $\bar{x} = \frac{2+4+6+8}{4}$

= 3 → संभेय संख्या

$\bar{x} = 5$

10) $S = \frac{8+15+17}{2}$
 $= \frac{40}{2}$
 $= 20$

3) $x^2 - 2x = 0$
 $x(x-2) = 0$
 $\therefore \boxed{x=0}$ OR $\boxed{x=2}$

11) रेखाणे - खेड परीमाण

4) लकुलक = 8

12) 13

5) खोष्टु सराग

13) लख → 4

6) य-सजा

14) खोष्टु - X

7) $P(x) = (1)^4 + (1)^3 - 2(1)^2$
 $+ (1) + 1$
 $P(x) = 2$ खेड

15) लकुलक - ✓

16) खोष्टु - X

विभाग- B 17-26 हरेक ना '2' गुण

17) लजाडारनी व.स.सो = 2 पाख h
 $220 = 2 \times \frac{22}{7} \times \frac{h}{2} \times h$
 $h = \frac{220}{22}$

h = 10 खेडनी

OR $\text{सिखलललल लुनललल} = 2 [lb + bh + lh]$

$$= 2 [20 \times 15 + 15 \times 10 + 10 \times 20]$$

$$= 2 [300 + 150 + 200]$$

$$= 2 [650]$$

$$= 1300 \text{ मलम}^2$$

18) $p(1) = (1)^2 - 4(1) + 3$ } $p(2) = (2)^2 - 4(2) + 3$

$$= 1 - 4 + 3$$

$$= 0$$

$$= 4 - 8 + 3$$

$$= -1$$

19) $x = 0.4343 \dots$

$$100x = 43.4343 \dots$$

$$100x = 43 + 0.4343 \dots$$

$$100x - x = 43$$

$$99x = 43$$

$$x = \frac{43}{99}$$

20) $\frac{1}{7} = 0.142857$

$$\frac{3}{7} = 0.428571$$

21) $5x + 2y = k$

$$5(2) + 2(5) = k$$

$$10 + 10 = k$$

$k = 20$

OR $2x + 0y - 3 = 0$

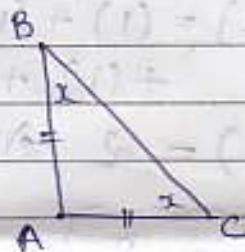
22) $\angle A + \angle B + \angle C = 180$

$$90 + 2x = 180$$

$$2x = 90$$

$$x = 45$$

$\angle B = \angle C = 45$



23) $\angle A + \angle C = 180$

$$\angle A - \angle C = 20$$

$$2\angle A = 200$$

$\angle A = 100$

OR

$$AM^2 = OA^2 - OM^2$$

$$= 25 - 16$$

$$AM = 3$$

$$AB = 2 \times AM$$

$$= 2 \times 3$$

$$AB = 6$$



$$24) \quad \left. \begin{aligned} 5x + 3x + 4x + 6x &= 360 \\ 18x &= 360 \\ x &= 20 \end{aligned} \right\} \begin{aligned} 3x &= 3 \times 20 \\ &= 60 \rightarrow \text{सौरी} \\ &\quad \text{नानो मूलो.} \end{aligned}$$

$$25) \quad AC = BD$$

$$AB + BC = BC + CD \quad (\text{आन्तर्गत भूभाग})$$

$$AB = CD$$

$$26) \quad 2x + y = 7$$

$$y = 7 - 2x$$

x	0	1	2	3
y	7	5	3	1

विनामि-८ 27-34 २२४ ११ ३ २३७१

$$27) \quad x + y + z + w = 360$$

$$x + y + x + y = 360$$

$$2(x + y) = 360$$

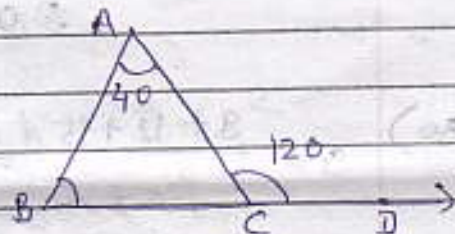
$$x + y = 180 \quad \therefore \text{AOB २५१ ६.}$$

OR
२६)

$$\angle A + \angle B = 120$$

$$40 + \angle B = 120$$

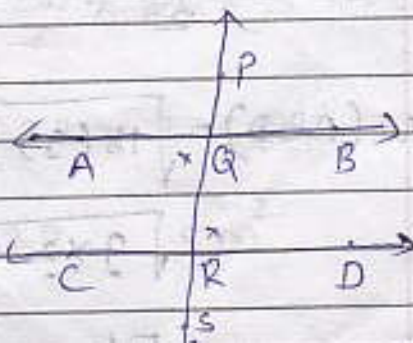
$$\angle B = 80$$



२८) ५५१ ÷ AB || CD तथा
PQ २०६५१ २०

$$\text{२११२१} \div \angle AQR = \angle QRD$$

$$\angle BQR = \angle QRC$$



આભિપ્રાય : PS એ AB ને Q માં ત્રાજી
 ED ને R માં છેદે છે.

$$\angle PQA = \angle QRC \text{ (અંગકોણ)} \quad \text{--- (1)}$$

$$\angle PQA = \angle BQR \text{ (અભિસંગ)} \quad \text{--- (2)}$$

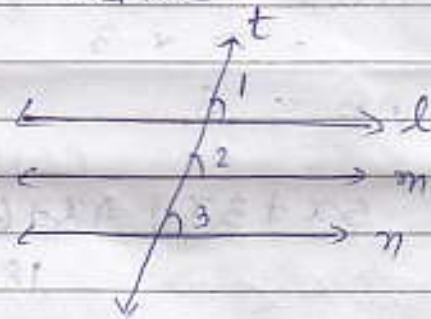
(1) અને (2) પરથી $\angle BQR = \angle QRC$

OR યજ્ઞ : મિલત ત્રાજી મિલત

આભિપ્રાય : મિલત

આભિપ્રાય : l, m, n ની

સંદિશી t છે.



મિલત તેથી $\angle 1 = \angle 2$ (અંગકોણ) --- (1)

મિલત તેથી $\angle 1 = \angle 3$ (અંગકોણ) --- (2)

(1) અને (2) પરથી $\angle 2 = \angle 3$

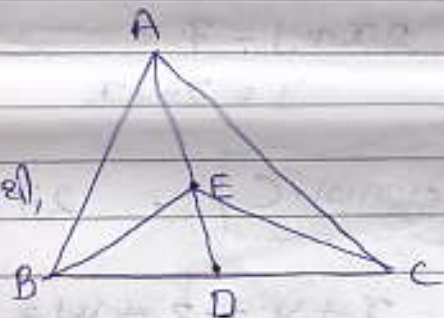
\therefore મિલત (સૂત્ર 6.4)

29) AD સરળી સેવાઈ,

$$\text{ar}(\triangle ABD) = \text{ar}(\triangle ACD)$$

$\triangle EBC$ ની સરળી ED સેવાઈ,

$$\text{ar}(\triangle EBD) = \text{ar}(\triangle ECD)$$



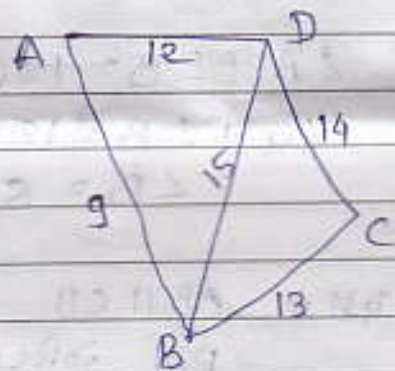
એ $\text{ar}(\triangle ABD) = \text{ar}(\triangle ACD)$

$$\text{ar}(\triangle ABE) + \text{ar}(\triangle EBD) = \text{ar}(\triangle ACE) + \text{ar}(\triangle EDC)$$

$$\therefore \text{ar}(\triangle ABE) = \text{ar}(\triangle ACE)$$

30) $S = \frac{9+12+15}{2} = \frac{36}{2} = 18$

$$S = \frac{13+14+15}{2} = \frac{42}{2} = 21$$



$$\text{ar}(\triangle ABD) = \sqrt{18(9)(6)(3)}$$

$$= \sqrt{9 \times 2 \times 9 \times 3 \times 2 \times 3}$$

$$= 54 \text{ cm}^2$$

$$\text{ar}(\text{BCD}) = \sqrt{21(8)(7)(6)}$$

$$= \sqrt{7 \times 3 \times 4 \times 2 \times 7 \times 3 \times 2}$$

$$= 84 \text{ cm}^2$$

$$\text{ar}(\text{ABCD}) = 54 + 84 = 138 \text{ cm}^2$$

31) चिप रोलीची व.स.ओ = $\pi r l \times 5$

$$r = 7$$

$$h = 24$$

$$l = 25$$

$$= \frac{22}{7} \times 7 \times 25 \times 5$$

$$= 2750 \text{ cm}^2$$

32) $\bar{x} = \frac{\sum x_i}{n}$

$$20 = \frac{\sum x_i}{5}$$

$$\sum x_i = 20 \times 5$$
$$= 100$$

$$\bar{x} = \frac{\sum x_i}{n}$$

$$25 = \frac{\sum x_i}{6}$$

$$\sum x_i = 25 \times 6$$
$$= 150$$

$$\text{उमेरेन शिवा = } 150 - 100 = 50.$$

33) $P(A) = \frac{12}{100} = 0.12$

$$P(B) = \frac{80}{100} = 0.8$$

$$P(C) = \frac{8}{100} = 0.08$$

34) सयकित्वां पृष्ठा = $2\pi r h + 2\pi r^2$

$$= 2\pi r [h + r]$$

$$= 2 \times \frac{22}{7} \times 21 [5 + 21]$$

$$= 2 \times 22 \times 3 \times 26$$

$$= 3432 \text{ cm}^2$$

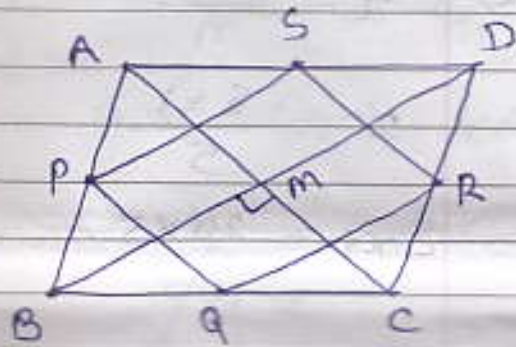
35) $\triangle ABC$ मी $AB = AC$
 $\angle A$ ची बाजू BD
 दोरता. $B-D-C$ मी ये.
 $\triangle ABD$ आणि $\triangle ACD$ मी.



$AB = AC$ (दाता)
 $\angle BAD = \angle CAD$ (समान कोण)
 $AD = AD$ (सर्वत्र सामान्य)

सादृश्याने $\triangle ABD \cong \triangle ACD$
 $\therefore \angle B = \angle C$ [CPCT]

36) चतुर्भुज $ABCD$ मी.
 $AB = BC = CD = DA$
 अर्थात, $\triangle ABD$ मी. $PS \parallel BD$
 $\therefore PS = \frac{1}{2} BD$ (1)



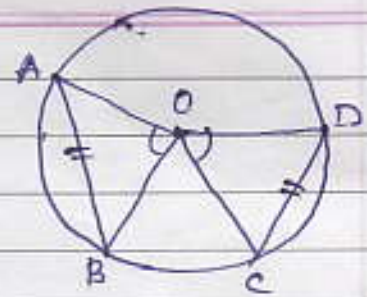
$\triangle CBD$ मी. $QR \parallel BD$
 $\therefore QR = \frac{1}{2} BD$ (2)

(1) आणि (2) मर्यादा $PS = QR$
 आणि, समानान्तर $PQ = RS$

अर्थात, $PS \parallel QR$ तथा $PQ \parallel RS$ अर्थात चौकोन $PQRS$ समानान्तर चौकोन आहे.
 $\angle QPS + \angle PQR = 180^\circ$ (संगत कोण)
 $\angle QPS = \angle PQR$
 $\therefore \angle QPS = \angle PQR = 90^\circ$
 \therefore चौकोन $PQRS$ लंबकोण आहे.

37) प्रश्न: AB तथा CD चतुर्भुज
 समान मापको छे.
 $AB = CD$

साक्ष्य: $\angle AOB = \angle COD$



साक्ष्य: $\triangle OAB$ तथा $\triangle OCD$ मा, \angle

$$AB = CD \text{ (प्रश्न)}$$

$$OA = OC \quad \left\{ \begin{array}{l} \text{रेडस र चतुर्भुज} \\ \text{मापको} \end{array} \right.$$

$$OB = OD \quad \left\{ \begin{array}{l} \text{रेडस र चतुर्भुज} \\ \text{मापको} \end{array} \right.$$

साक्ष्य, समान भुज, $\triangle OAB \cong \triangle OCD$

$$\therefore \angle AOB = \angle COD \text{ (CPCT)}$$

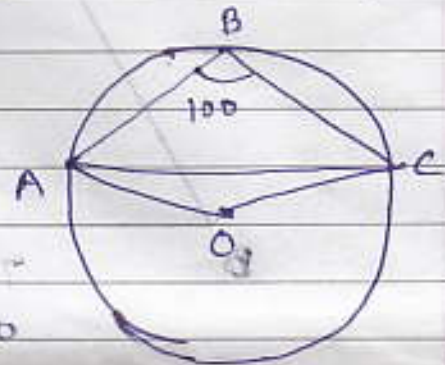
OR

$$\angle AOC = 2 \times \angle ABC$$

$$= 2 \times 100$$

$$= 200$$

$$\text{सिध्दांत } \angle AOC = 360 - 200 \\ = 160$$



$$\triangle AOC \text{ मा, } \angle A + \angle O + \angle C = 180$$

$$x + 160 + x = 180$$

$$2x + 160 = 180$$

$$2x = 180 - 160$$

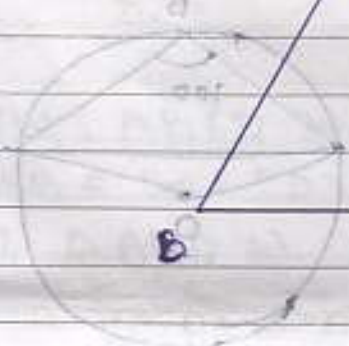
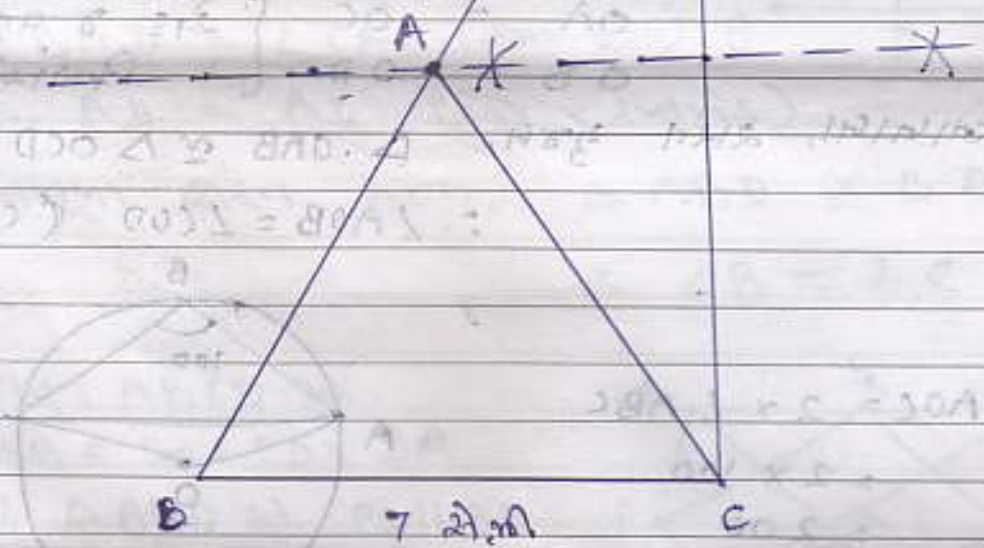
$$x = 10$$

$$\therefore \angle OAC = 10$$

38)

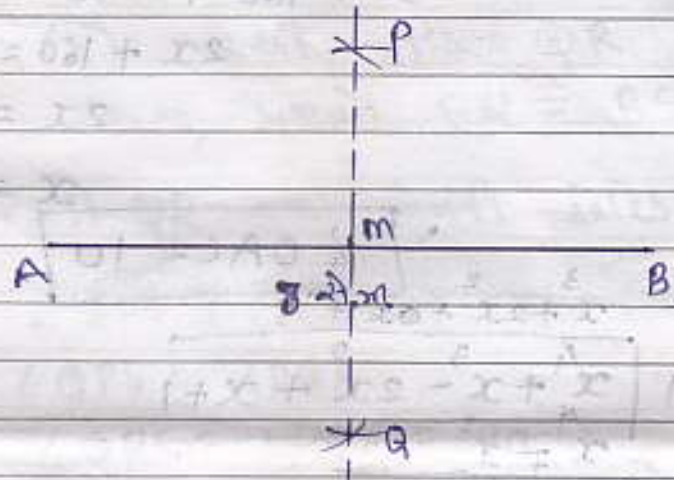
$$\begin{array}{r} x^3 + 2x^2 + 0x + 5 \\ x-1 \overline{) } \\ \underline{x^3 + x^2 - 2x + x + 1} \\ 2x^3 - 2x^2 \\ \underline{-2x^3 + 2x^2} \\ 0x^2 + 0x \\ \underline{-0x^2 + 0x} \\ 4x + 1 \\ \underline{-4x + 4} \\ 5x - 5 \end{array}$$

39)



OR

$$\begin{aligned} \angle A + \angle C + \angle B &= 180^\circ \\ \angle A + \angle C + \angle C &= 180^\circ \\ \angle A + \angle C + \angle C &= 180^\circ \\ \angle A + \angle C + \angle C &= 180^\circ \\ \angle A + \angle C + \angle C &= 180^\circ \end{aligned}$$



$$\begin{aligned} PQ &\perp AB \\ AM &= BM \end{aligned}$$

सुझा

- 1) $AB = 8$ सेमी दीया.
 - 2) 2133 गुण त्रिज्या लघु, A तथा B ने डेनू जाली लिङ्को P तथा Q सेनया.
 - 3) PQ होरी लिङ् म सेनयुं.
- अन्य, मीजेतो संनहितलानड $PQ \perp AB$ मय्या.

Revised Answer Key - Mathy

(38)

$$x^2 + x + 3$$

$$\begin{array}{r} x+2 \overline{) \begin{array}{r} x^2 + 3x^2 + 5x + 6 \\ \underline{x^2 + 2x^2} \\ x^2 + 5x \\ \underline{x^2 + 2x} \\ 3x + 6 \\ \underline{3x + 6} \\ 0 \quad 0 \end{array}} \end{array}$$

भाजक = $x^2 + x + 3$

शेष = 00

~~$x^2 + x + 3$~~

एनरल-9

वेपुत नरलन

9/04/19

(15) समानांतर पासाके उदणनना '3' शरररररर

शरररररर $\frac{1}{2}$ छे. - अरररररर - 1 mark