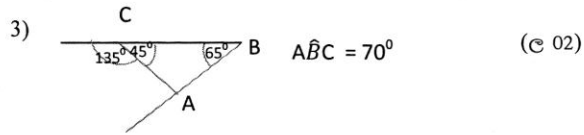


10 ශ්‍රේණිය

I A පත්‍රයේ පිළිතුරු

1) $A = \{2, 3, 5, 7\}$ (෧ 02)

2) $m = \frac{3}{2}$ $C = 1$ (෧ 02)



4) $(x - a)^2 = x^2 - 4x + b$ $a = 2$ (෧ 01)
 $a = 2, b = 4$ $b = 4$ (෧ 01)

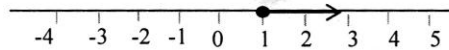
5) $\frac{8}{100} \times 60000$
 වර්ෂයකට බදු 4800 (෧ 02)

6) මිනිත්තුවකට = 500l
 මිනිත්තු 12 = 500 x 12
 = 6000 l (෧ 02)

7) රොම්බසය (෧ 02)

8) දින 04 (෧ 02)

9) $2x + 3 \geq 5$ විසඳීම (෧ 01)
 $2x \geq 2$
 $x \geq 1$

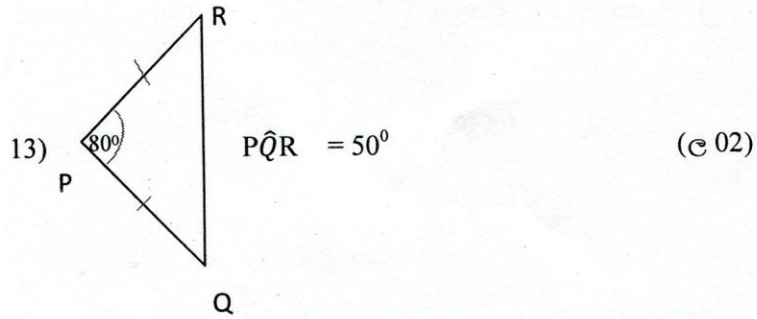


(෧ 01)

10) $B\hat{A}C = 52^\circ$ (෧ 02)

11) අක්ෂරය D (෧ 02)

12) $\frac{40 \times 7 + 48}{8}$
41 (෧ 02)



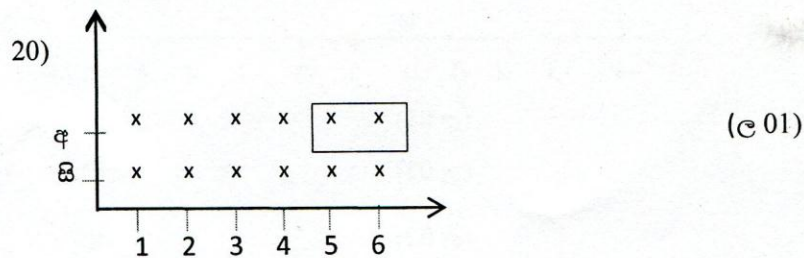
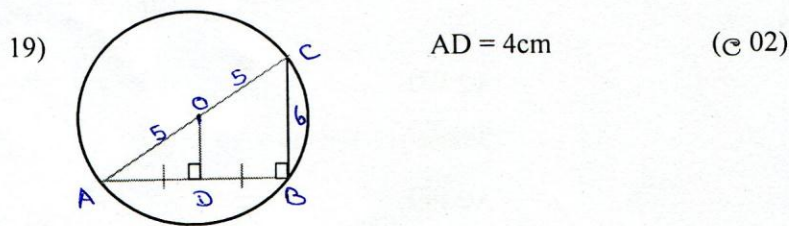
14) $(P \cup Q)'$ (c 02)

15) 25×8
 200cm^2 (c 02)

16) $\frac{5}{(x+1)}$ (c 02)

17) $ABC \triangle \equiv xyz \triangle$ (කෝ.කෝ.පා) (c 02)

18) $\frac{x+5}{2} = 4$
 $x+5 = 8$
 $x = 3$ (c 02)



$$\frac{2}{12}$$

$$\frac{1}{6}$$

(c 01)

$$21) \log_2 64 \log_4 16$$

$$= 6 - 2$$

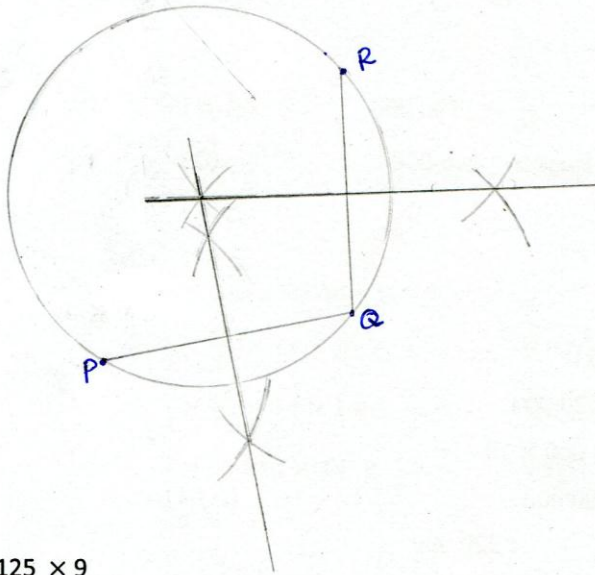
$$= 4$$

(c 02)

$$22) \hat{A}BD = 48^\circ$$

(c 02)

23)



(c 02)

$$24) 1125 \times 9$$

$$10125\text{cm}^3$$

(c 02)

$$25) S_n = \frac{n}{2} (a + l)$$

$$= \frac{20}{2} (1 + 20)$$

$$= 10 \times 21$$

$$= 210$$

(c 02)

10 ශ්‍රේණිය

I B පත්‍රයේ පිළිතුරු

1) මෝටර් රථය ගැනීමට $-\frac{7}{10}$

I. නිවස අළුත්වැඩියාවට $= \frac{3}{10}$ න් $\frac{2}{3}$
 $= \frac{3}{10} \times \frac{2}{3}$
 $= \frac{1}{5}$ (c 02)

II. ඉතිරිය $= 1 - (\frac{7}{10} + \frac{1}{5})$
 $= 1 - \frac{9}{10}$
 $= \frac{1}{10} = 120\ 000$ (c 01)

(a) නිවස අළුත්වැඩියාවට 240 000 (c 02)

(b) $120\ 000 \times 7$ (c 01)

840000 (c 02)

III. $11000 \times 12 \times 10$
 ගෙවූ මුදල $= 1320\ 000$
 ණය මුදල $= 120\ 000 \times 10$
 $= 1\ 200\ 000$ (c 01)

වැඩිපුර ගෙවූ මුදල	1 320 000
	1 200 000
	රු 120 000

(c 01)

2)

I. 6×10 මිනිස් දින 60 (c 01)

II. $6 \times 4 = 24$ (c 01)

දින 4කට පසු අවසන් වූ ප්‍රතිශතය $= \frac{24}{60} \times 100$
 $= 40\%$ (c 02)

III. ඉතිරි මිනිස් දින ගණන $= 60 - 24 = 36$
 මිනිසුන් 04 දෙනාට දින 9 (c 02)

IV. දැන් මිනිසුන් 9 යි $\frac{36}{9}$ දින 04 (c 02)

V. $60 \times 1200 =$ රු 72000 (c 02)

3)

I. 14 cm (e 01)

II. $\frac{1}{2} \pi r^2 + \frac{1}{2} \times 28 \times 26$ (e 01)

$$\frac{1}{2} \times \frac{22}{7} \times 14 \times 14 + \frac{1}{2} \times 28 \times 26$$

$$22 \times 14 + 14 \times 26$$

$$14 \times 48$$

$$672 \text{ cm}^2 \quad (\text{e } 01)$$

III. $28 \times 40 - 672$

$$1120 - 672$$

$$448 \text{ cm}^2 \quad (\text{e } 02)$$

IV. නව වෘත්තයේ අරය r_1 නම්,

$$\frac{1}{2} \times \frac{22}{7} \times 14 \times 14 \times \frac{1}{2} = \pi r_1^2 \quad (\text{e } 01)$$

$$\frac{1}{2} \times \frac{22}{7} \times 14 \times 14 \times \frac{1}{2} = \frac{22}{7} r_1^2 \quad (\text{e } 01)$$

$$\frac{1}{2} \times \frac{22}{7} \times 14 \times 14 \times \frac{1}{2} \times \frac{7}{22} = r_1^2$$

$$49 = r_1^2 \quad (\text{e } 01)$$

$$r = 7 \text{ cm} \quad (\text{e } 01)$$

4)

ඉතිරි ප්‍රමාණය	මධ්‍ය අගය x	පවුල් ගණන f	$f x$
10 - 14	12	3	36
15 - 19	17	7	119
20 - 24	22	12	264
25 - 29	27	10	270
30 - 34	32	8	256
	(e 02)		
		40	945

(e 03)

I. $\sqrt{\quad}$

II. $\sqrt{\quad}$

III. මධ්‍යනය = $\frac{945}{40} = \frac{94.5}{4}$

23.625m²

(C 02)

එක් පවුලකට අයිති ඉඩම් ප්‍රමාණය

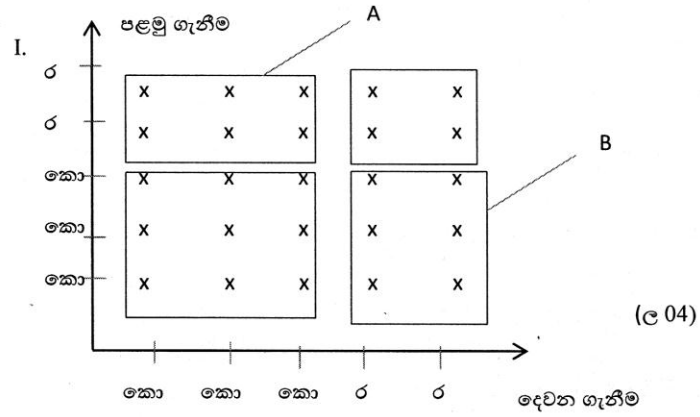
(C 01)

IV. පවුල් 18 × 2000

මුදල = රු 36000

(C 02)

5)



II. $\frac{13}{25}$ (C 01)

III. $\frac{10}{25}$ (C 01)

IV. A හා B කොටස් දැක්වීමට (C 02)

V. $\frac{4}{25}$ (C 02)

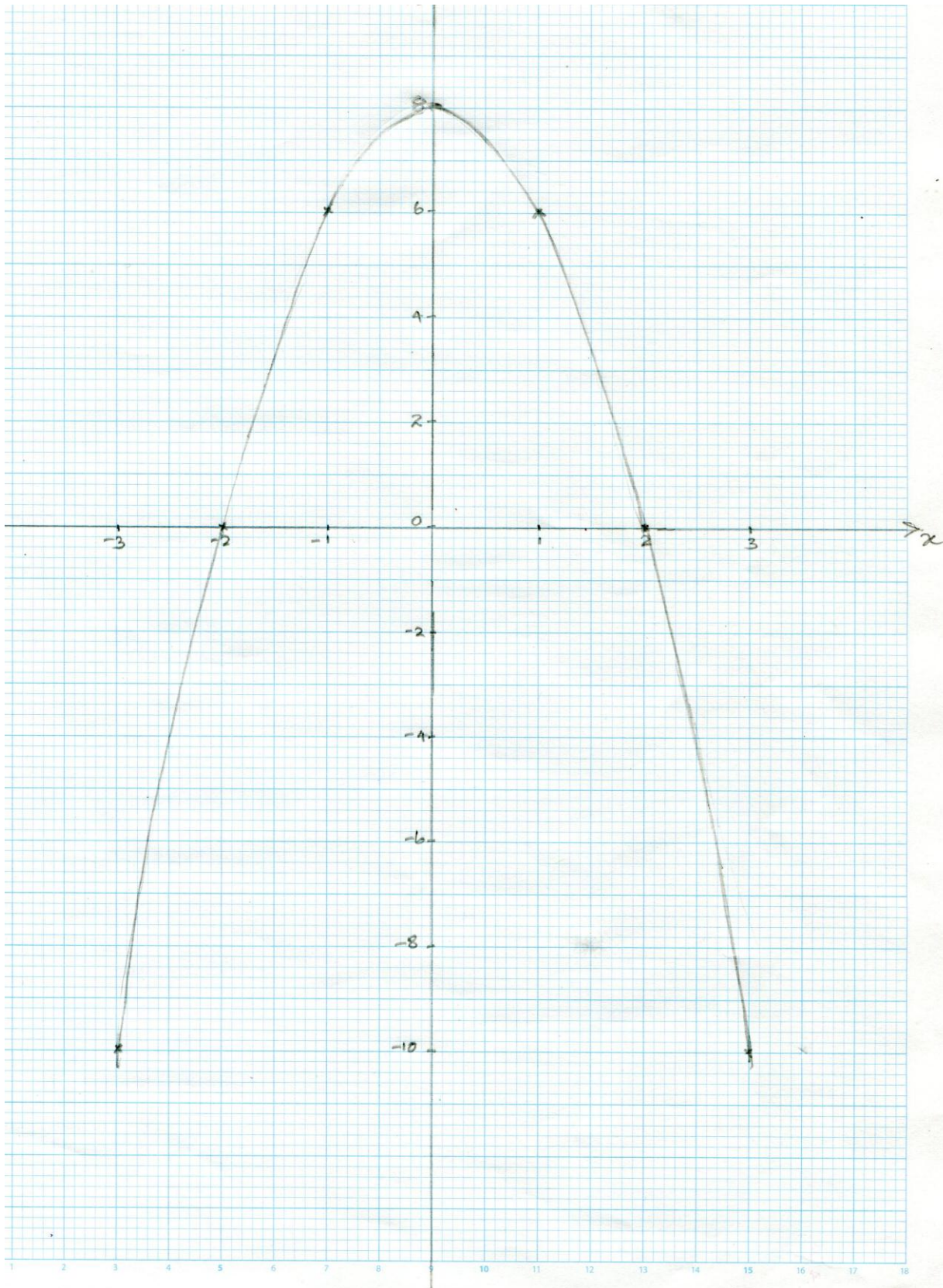
10 ශ්‍රේණිය
II පත්‍රයේ පිළිතුරු

(02) (a) (i) $y = -2x^2 + 8$ $y = -2x^2 + 8$
 $y = -2x - 2^2 + 8$ $y = -2x^0^2 + 8$
 $y = -8 + 8$ $y = 8$
 $y = 0$

සාමාන්‍ය සලකා දායක ලියා දැක්ම මතු දෙන්න. ----- (02)

- (ii) ඉක්මනින් දැක්ම
 දකුණ මතු කිරීම ----- (01)
 මෙහි 6 නමක් තිබේදී මතු කිරීම ----- (01)
 පුළුල් වන්න

- (b) (i) (0, 8) ----- (02)
 (ii) $y = -2x^2 + 3$ ----- (02)
 (iii) -2 ----- (01)



Name: _____
 Date: _____

School _____
 Grade _____

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10 ශ්‍රේණිය

II පත්‍රයේ පිළිතුරු

(03) (a) (i) $6a = 2 \times 3 \times a$

$4ab = 2 \times 2 \times a \times b$

$12a^2b^2 = 2 \times 2 \times 3 \times a \times a \times b \times b$

අ.හ.ග = $2 \times 3 \times a \times 2 \times b \times b$
 $= \underline{\underline{12ab^2}}$

----- (02)

(ii) $\frac{6}{x} + \frac{3}{x+3}$

$= \frac{6x+18+3x}{x(x+3)}$

$= \underline{\underline{\frac{9x+18}{x(x+3)}}}$

----- (03)

(b) $20a + 8b = 640$ — (1)

$25a + 15b = 950$ — (2)

----- (01)

----- (01)

(1) $\div 4$ ව, $5a + 2b = 160$ — (3)

(2) $\div 5$ ව, $5a + 3b = 190$ — (4)

(4) - (3) ව, $b = 30$

----- (01)

b හි අගය (3) ව අවදානය

$5a + 2b = 160$

$5a + 2 \times 30 = 160$

----- (01)

$5a + 60 = 160$

$5a = 100$

$a = 20$

----- (01)

$\underline{\underline{a = 20}}, \underline{\underline{b = 30}}$

10 ශ්‍රේණිය

II පත්‍රයේ පිළිතුරු

(04)

$$(a) A = \frac{12.5 \times 123}{6.25}$$

$$\lg A = \lg 12.5 + \lg 123 - \lg 6.25$$

$$= 1.0969 + 2.0899 - 0.7959$$

$$= 3.1868 - 0.7959$$

$$\lg A = 2.3909$$

$$\therefore A = \text{Anti-log } 2.3909$$

$$A = \underline{\underline{246}}$$

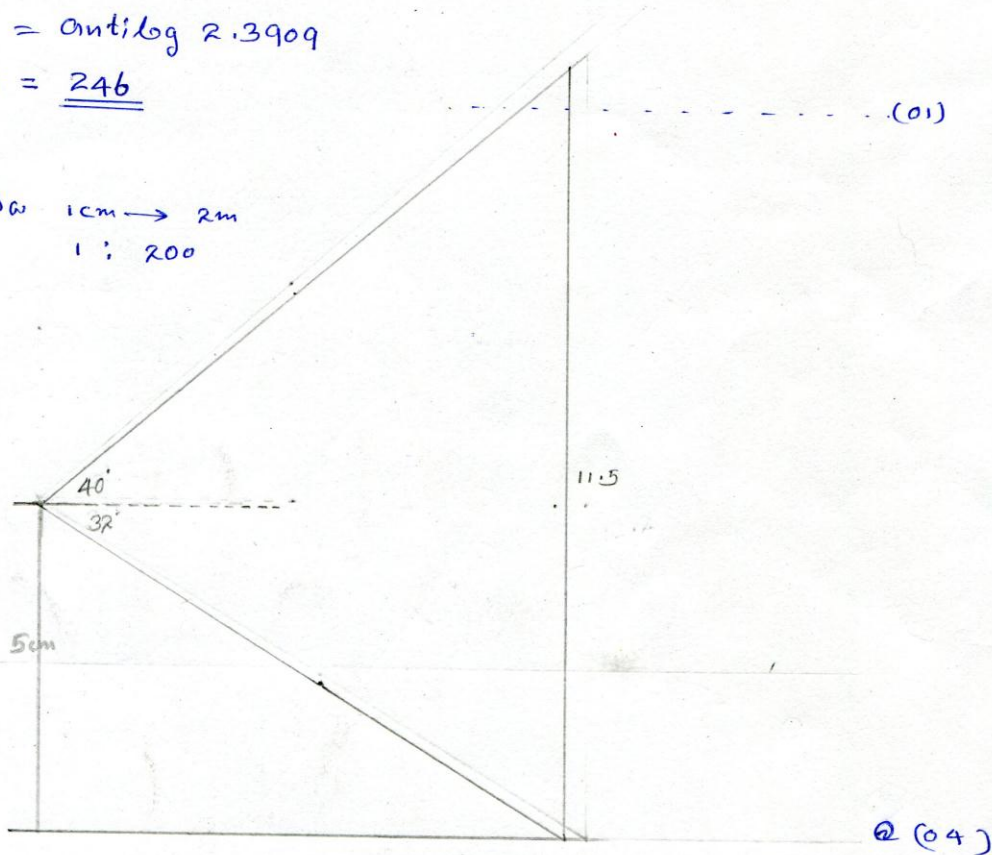
..... (0.01)

..... (0.01)

..... (0.01)

..... (0.1)

(b) පරිමාණ 1cm → 2m
1 : 200



$$\text{පරිමාණ උස} = 11.5 \text{ cm } (\pm 0.1)$$

$$\text{නිශ්චිත උස} = 11.5 \times 2$$

$$= \underline{\underline{23 \text{ m}}}$$

(0.02)

10 ශ්‍රේණිය
II පත්‍රයේ පිළිතුරු

(05) (i) 75-89

(@ 01)

(ii)

පන්ති ප්‍රාන්තරය	මධ්‍ය අගය x	අංකයන් f	fx
30 - 44	37	04	148
45 - 59	52	06	312
60 - 74	67	05	335
75 - 89	82	07	574
90 - 104	97	05	485
105 - 119	112	03	336
		30	2190

(ii) මධ්‍යගතය

$$= \frac{\sum fx}{\sum f} \quad \text{--- (@ 01)}$$

මධ්‍ය අගය ගණනය කිරීම (@ 01)

fx (@ 01)

$\sum fx$ (@ 01)

$$= \frac{2190}{30}$$

$$= \underline{\underline{73}} \quad \text{--- (@ 01)}$$

(iii) $73 \times 10 = 730$

(@ 02)

(iv) 2190×3

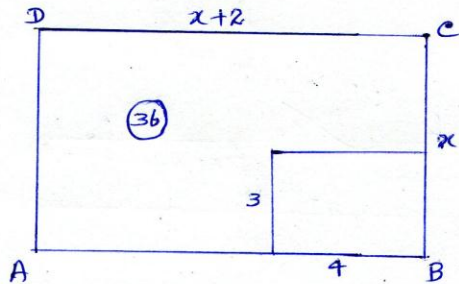
$$= \underline{\underline{6570}}$$

(@ 02)

10 ශ්‍රේණිය

II පත්‍රයේ පිළිතුරු

(06)



ABCD වර්ගඵලය = $x(x+2)$ (02)

ඔහු කැපෑ කොටස = 3×4
 = 12 (01)

$x(x+2) - 12 = 36$ (01)

$x^2 + 2x - 12 = 36$ (01)

$x^2 + 2x - 12 - 36 = 0$

$x^2 + 2x - 48 = 0$ (01)

$x^2 + 8x - 6x - 48 = 0$

$x(x+8) - 6(x+8) = 0$

$(x+8)(x-6) = 0$ (01)

$x+8 = 0$ හෝ $x-6 = 0$

$x = -8$ හෝ $x = 6$ (02)

දිගේ කැපෑ ඒක භාගයක් විය යුතුය.

ඉලඹ = 6 cm (02)

10 ශ්‍රේණිය
II පත්‍රයේ පිළිතුරු

(07)

$$a = 1000 \quad \dots \dots \dots (01)$$

$$n = 12 \times 3$$

$$n = 36 \quad \dots \dots \dots (01)$$

$$S_n = 130500 \quad \dots \dots \dots (01)$$

$$S_n = \frac{n}{2} \{2a + (n-1)d\} \quad \dots \dots \dots (01)$$

$$130500 = \frac{36}{2} \{2 \times 1000 + (36-1)d\} \quad \dots \dots (01)$$

$$130500 = 18 \{2000 + 35d\} \quad \dots \dots (01)$$

$$\frac{130500}{18} = 2000 + 35d$$

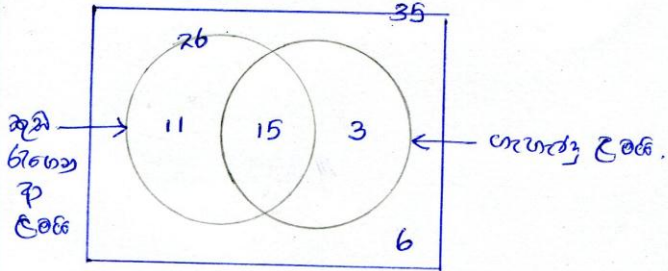
$$7250 - 2000 = 35d \quad \dots \dots \dots (02)$$

$$\frac{5250}{35} = d \quad \dots \dots \dots (01)$$

$$\underline{\underline{d = 150}} \quad \dots \dots \dots (01)$$

10 ශ්‍රේණිය
II පත්‍රයේ පිළිතුරු

(08) (i)



(ii) 3

(iii) 9

(iv) $\frac{15}{35}$

..... (04)

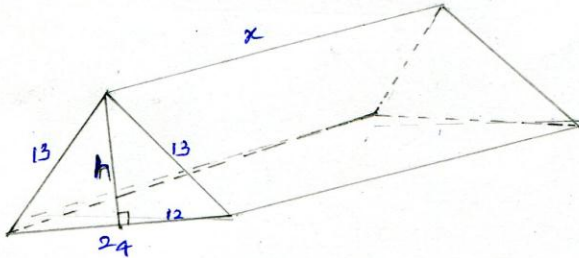
..... (02)

..... (02)

..... (02)

10 ශ්‍රේණිය
II පන්තියේ පිළිතුරු

(69)



(i) $12 \text{ cm} \times 10 \text{ cm} \times 8 \text{ cm}$
 $= \underline{\underline{960 \text{ cm}^3}}$

..... (202)

(ii) $13^2 = h^2 + 12^2$
 $169 = h^2 + 144$
 $169 - 144 = h^2$
 $25 = h^2$
 $\underline{\underline{h = 5}}$

..... (201)

..... (202)

(iii) $\frac{1}{2} \times 24 \times 5$
 $\underline{\underline{60 \text{ cm}^2}}$

..... (202)

(iv) $960 = 60 \times x$

..... (202)

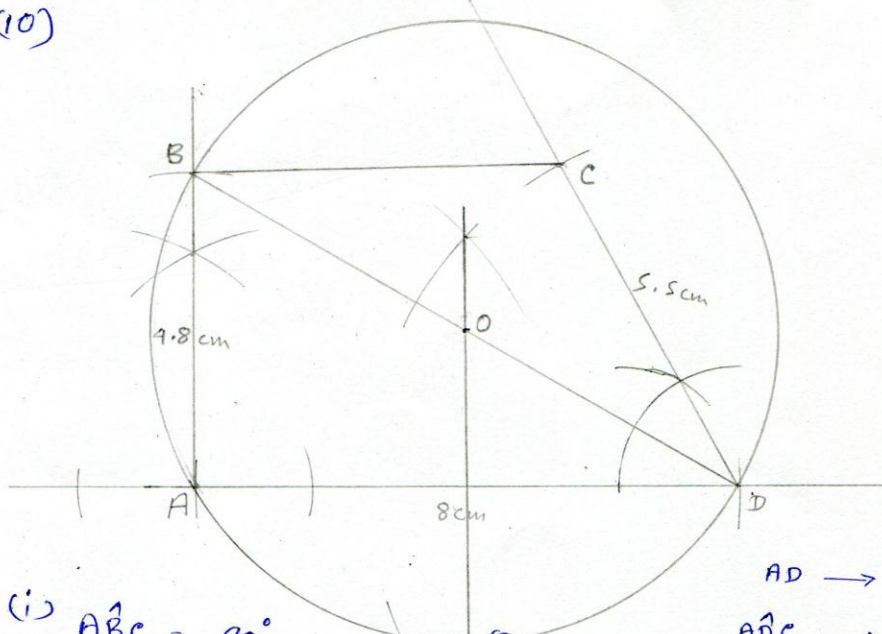
$x = \frac{960}{60}$

$\underline{\underline{x = 16 \text{ cm}}}$

..... (201)

10 ශ්‍රේණිය
II පතයේ පිළිතුරු

(10)

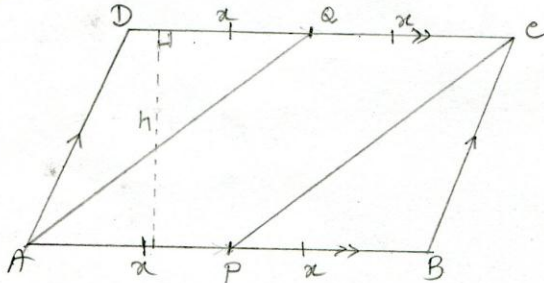


- (i) $\angle ABC = 90^\circ$ (0.1)
- (ii) ඉරික්කොණක් (0.1)
- (iii) දිග 4.7cm (± 0.1) (0.1)

- AD \rightarrow 0.1
- ABC \rightarrow 0.1
- DAB \rightarrow 0.1
- AB \rightarrow 0.1
- DC \rightarrow 0.1
- ලම්බ කණ්ඩායම 0.1
- වෘත්තය 0.1

10 ശ്രേണി
II പന്ത്രയ്ക്കിടത്തു

(11)



മുഴുവൻ (01)

(i) $AB = CD$ (ചിത്രത്തിൽ കാണുന്നതുപോലെ)
 $AP = PB$ (AB ന്റെ മധ്യഭാഗം P യെ കാണിക്കുന്നു)
 $\therefore AP = \frac{1}{2} AB$ (01)

$DQ = QC$ (CD ന്റെ മധ്യഭാഗം Q യെ കാണിക്കുന്നു)
 $\therefore QC = \frac{1}{2} CD$ (01)

$AB = CD$ ആയതിനാൽ
 $\frac{1}{2} AB = \frac{1}{2} CD$
 $\therefore AP = QC$
 എങ്കിൽ $AP \parallel QC$ ഉം $AP = QC$ ഉം } (02)

$\therefore APQC$ ചിത്രത്തിൽ കാണുന്ന ഒരു (ചിത്രത്തിൽ കാണുന്നതുപോലെ) ചതുരകമാണ്. (ചിത്രത്തിൽ കാണുന്നതുപോലെ) (01)

(ii) $AB = 2x$ ഉം AB ന്റെ CD ന്റെ ദൂരം h ആണെന്ന്.

$ABCD$ ന്റെ വിസ്താരം = $2x \times h$ (01)

ADQ ന്റെ വിസ്താരം = $\frac{1}{2} x h$ (01)

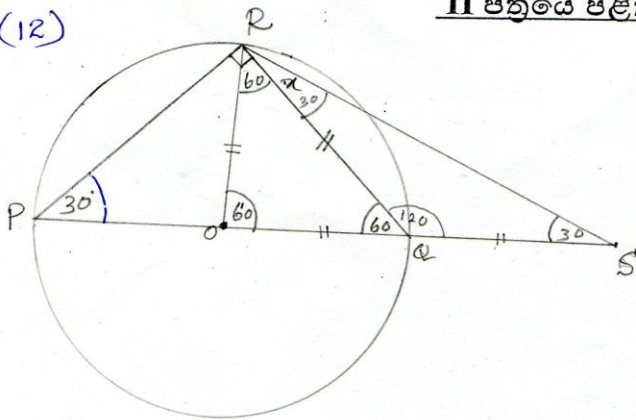
$2xh = (\frac{1}{2} x h) \times 4$ (01)

$\therefore ABCD = ADQ \times 4$

$\therefore ADQ = \frac{1}{4} ABCD$ ആണ്. (01)

10 ശ്രേണി
II പന്ത്രയം പിළിമുറ

(12)



മുറയ്ക്കൽ ഉണ്ടാക്കുന്ന തന്ത്രങ്ങൾ (20)

- ക. ക. ഗ :- $\angle OR = 2\angle RS$ ന്നു
 സമീപം :- $\angle PR = 30^\circ$ (21 ന്നു)
 $\angle PRQ = 90^\circ$ (21 ന്നു തിരഞ്ഞെടുക്കൽ) (20)
- $\therefore \angle PQR = 60^\circ$ (A യുടെ തിരഞ്ഞെടുക്കൽ 180 ന്നു) (20)
- $OQ = OR$ (21 ന്നു)
 $\therefore \angle ORQ = 60^\circ$ (21 ന്നു തിരഞ്ഞെടുക്കൽ)
 $\therefore \angle ROQ = 60^\circ$
 $\therefore ORQ$ തിരഞ്ഞെടുക്കൽ (20)
- $OQ = QS$ (21 ന്നു)
 $OQ = QR$ (21 ന്നു തിരഞ്ഞെടുക്കൽ)
 $\therefore QS = QR$ (21 ന്നു)
 $\angle RS = \angle RQ$ (20)
 $\angle RS + \angle RQ = \angle ROQ$ (21 ന്നു തിരഞ്ഞെടുക്കൽ) (20)
 $\angle ROQ = \angle ROQ$ (21 ന്നു തിരഞ്ഞെടുക്കൽ)
 $\therefore \angle ROQ = \angle RS + \angle RQ$
 $\therefore \underline{\underline{\angle OR = 2\angle RS}}$ (20)