NUR AFRICA ACADEMY



CENTER OF WISDOM

Maths grade 5

Exercise 3.2.1

page 72-73

#2

a) $P = 144\ cm$

$\boxed{l = w}$

$P = l + w + l + w$

but $l = w$

$P = l + l + l + l$

$P = 4l$

$144\ cm = 4l$

$\frac{144\ cm}{4} = \frac{4l}{4}$

$l = 36\ cm$

$\boxed{\text{so } l = w = 36\ cm}$

Exercise 3.32 - Page -75

#5 $A = 144\,m^2$

$l = 9m$

$w = ?$

$[A = l \times w]$

$144\,m^2 = 9m \times w$

$\frac{144\,m^2}{9m} = \frac{9m \times w}{9m}$

$w = 16\,m$

#6 $A = 1080\,cm^2$

$w = 90\,cm$

$l = ?$

$A = l \times w$

$1080\,cm^2 = l \times 90\,cm$

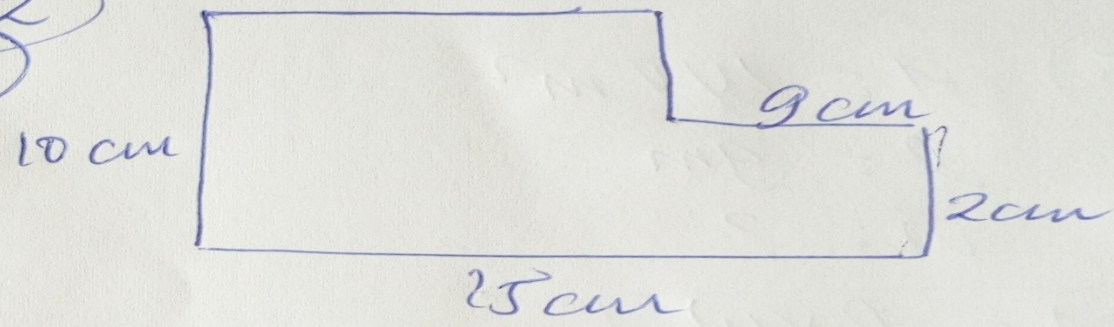
$\frac{1080\,cm^2}{90\,cm} = \frac{l \times 90\,cm}{90\,cm}$

$l = 12\,cm$

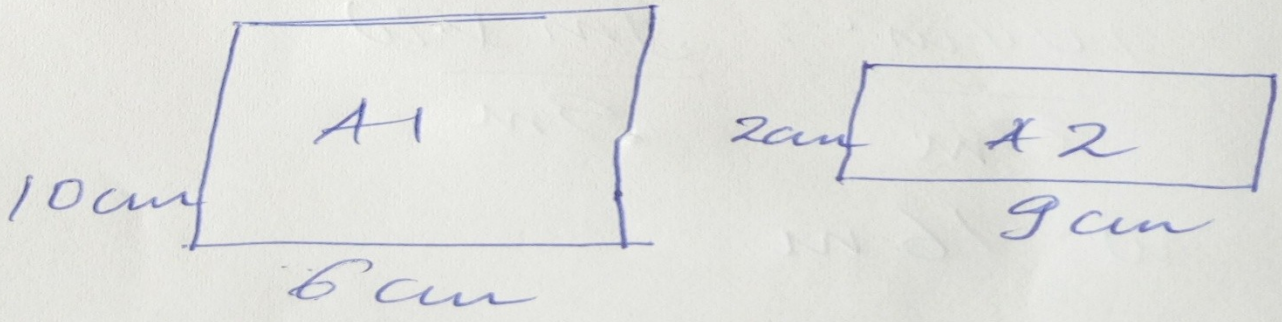
Exercise 3.2f page 78-79

#2

d.



$A = A1 + A2$



$A = (10\,cm \times 6\,cm) + (9\,cm \times 2\,cm)$

$= 60\,cm^2 + 18\,cm^2$

$= 78\,cm^2$

Exercise 3.3.2 - Page 83

1)

a) $V = l \times w \times h = 7cm \times 7cm \times 2cm$

$= 49cm^2 \times 2cm$

$= 98cm^3$

b) $V = l \times w \times h$

$= 9cm \times 4cm \times 6cm$

$= 36cm^2 \times 6cm$

$= 216cm^3$

3.4 Miscellaneous Exercises

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 # 12

$\ell = 9\text{ cm}$

$w = 9\text{ cm}$

$h = 65\text{ mm}$

→ First convert 65 mm to cm

$1\text{ cm} = 10\text{ mm}$

$? = 65\text{ mm}$

$$\frac{65\text{ mm} \times 1\text{ cm}}{10\text{ mm}} = 6.5\text{ cm}$$

$V = \ell \times w \times h$

$= 9\text{ cm} \times 9\text{ cm} \times 6.5\text{ cm}$

$= 81\text{ cm}^2 \times 6.5\text{ cm}$

$= 526.5\text{ cm}^3$

 # 12

$\ell = 13\text{ cm}$

$w = 9\text{ cm}$

$V = 520\text{ cm}^3$

$V = \ell \times w \times h \Rightarrow 520\text{ cm}^3 = 13\text{ cm} \times 9\text{ cm} \times h$

$$\frac{520\text{ cm}^3}{117\text{ cm}^2} = \frac{117\text{ cm}^2 \times h}{117\text{ cm}^2}$$

$h = 4.4\text{ cm}$

Exercise 4.1.2

Page - 92

#3 a) $130^\circ + \beta = 360^\circ$

$\beta = 360^\circ - 130^\circ$

$\beta = 230^\circ$

d) $40^\circ + \beta = 360^\circ$

$\beta = 360^\circ - 40^\circ$

$\beta = 320^\circ$

Exercise 4.1.4

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#2 a) less than

b) less than, greater than

c) greater than

#3 a - straight angle

b) acute angle

c) Right angle

d) Obtuse angle

e) Reflex angle

~~#4~~ #4

Acute - $40^\circ, 12^\circ, 28^\circ, 32^\circ, 84^\circ$

Right - 90°

Obtuse - $165^\circ, 135^\circ$

Straight - 180°

Reflex - 210°

Exercisce 4.1.5

#1 $\alpha = 70^\circ$

$\beta = ?$

$\alpha + \beta = 360^\circ$

$70^\circ + \beta = 360^\circ$

$\beta = 360^\circ - 70^\circ$

$\beta = 290^\circ$

an