

Penyelesaian Lengkap

PRAKTIS 4

Bahagian A

1 Skala/Scale = $\frac{8}{x} = \frac{1}{4}$

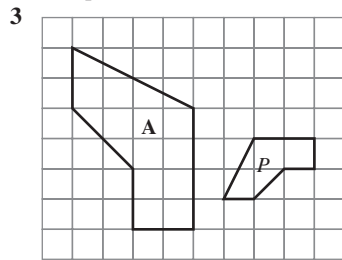
Panjang sebenar/Actual length = $x = 8 \times 4 = 32$ cm

Jawapan/Answer: D

2 Skala/Scale = $1 : \frac{1}{5} = \frac{5}{1}$
 $\frac{3}{x} = \frac{5}{1}$

Panjang sebenar/Actual length = $x = \frac{3}{5} = 0.6$ cm

Jawapan/Answer: B



Jawapan/Answer: A

Bahagian B

1 (a) (i) Skala/Scale = $\frac{2}{6} = 1 : 3$

3 : 1

1 : $\frac{1}{3}$

1 : 3

(ii) $\frac{1}{3} = \frac{0.9}{BC}$

$BC = 0.9 \times 3 = 2.7$ cm

0.3 cm

2.7 cm

3 cm

(b) (i) Lebar segi empat itu pada lukisan berskala itu jika lebar sebenar ialah 4 cm.
The width of the rectangle in the scale drawing if the actual width is 4 cm.

Skala/Scale = $1 : \frac{1}{2} = \frac{2}{1}$
 $\frac{x}{4} = \frac{2}{1}$

(ii) Lebar dalam lukisan/Scale width = $x = 2 \times 4 = 8$ cm

Panjang sebenar segi empat itu jika panjang pada lukisan berskala itu ialah 18 cm.
The actual length of the rectangle if the length in the scale drawing is 18 cm.

$\frac{18}{y} = \frac{2}{1}$

Panjang sebenar/Actual length = $y = \frac{18}{2} = 9$ cm

4 Skala/Scale = $1 : \frac{1}{12} = \frac{12}{1}$
 $\frac{9}{x} = \frac{12}{1}$

Panjang sebenar/Actual length = $x = \frac{9}{12} = 0.75$ cm
 $= 7.5$ mm

Jawapan/Answer: C

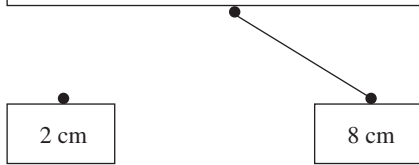
5 Skala/Scale = $1 : n = \frac{1}{n}$
 $\frac{1}{n} = \frac{2}{14}$
 $n = 7$

Jawapan/Answer: B

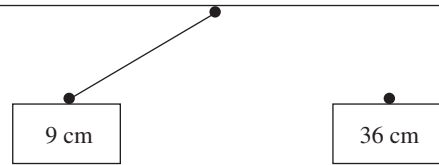
6 Skala/Scale = $1 : n = \frac{1}{n}$
 $\frac{1}{n} = \frac{5}{5\,000\,000}$
 $n = 1\,000\,000$

Jawapan/Answer: D

Lebar segi empat itu pada lukisan berskala jika lebar sebenar ialah 4 cm.
The width of the rectangle in the scale drawing if the actual width is 4 cm.



Panjang sebenar segi empat itu jika panjang pada lukisan berskala ialah 18 cm.
The actual length of the rectangle if the length in the scale drawing is 18 cm.



2 (a)

	Pernyataan/Statement	(✓) atau/or (X)
(i)	Jika suatu poligon dilukis mengikut skala 1 : n di mana $n > 1$, maka poligon di dalam lukisan itu adalah lebih besar daripada poligon sebenar. <i>If a polygon is drawn to a scale of 1 : n where $n > 1$, then the polygon in the drawing is bigger than the actual polygon.</i>	X
(ii)	Jika skala linear bagi suatu peta ialah 1 : 1000, maka skala luasnya ialah 1 : 1 000 000. <i>If the linear scale of a map is 1 : 1000, then its area scale is 1 : 1 000 000.</i>	✓

(b) (i) $\frac{12}{x} = \frac{1}{4}$

Panjang sebenar/Actual length, $x = 12 \times 4 = 48$ cm



(ii) $AC = \sqrt{20^2 + 48^2} = 52$ cm

$\frac{y}{52} = \frac{1}{4}$

Lebar dalam lukisan/Scaled width, $y = \frac{52}{4} = 13$ cm



3 (a)

	Pernyataan/Statement	Benar atau Palsu True or False
(i)	Skala yang digunakan untuk melukis segi tiga I ialah $1 : \frac{1}{2}$. <i>The scale used to draw triangle I is $1 : \frac{1}{2}$.</i>	Palsu/False

	Pernyataan/Statement	Benar atau Palsu True or False
(ii)	Skala yang digunakan untuk melukis segi tiga II ialah $1 : \frac{1}{5}$. <i>The scale used to draw triangle II is $1 : \frac{1}{5}$.</i>	Benar/True

(b) (i) $\frac{r}{7} = \frac{1}{2}$

Jejari/Radius, $r = \frac{7}{2} = 3.5$ cm

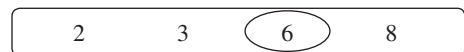


(ii) Skala/Scale = $1 : \frac{1}{3} = \frac{3}{1}$

$\frac{9}{r} = \frac{3}{1}$

Jejari/Radius, $r = \frac{9}{3} = 3$ cm

$d = 3 \times 2 = 6$ cm



Bahagian C

1 (a) (i) Jarak/Distance = $\frac{1}{25\,000\,000} \times 15\,000\,000 = 6$ cm

(ii) Skala/Scale = $\frac{5}{15\,000\,000} = \frac{1}{n}$

$n = \frac{15\,000\,000}{5} = 3\,000\,000$

(b) (i) Skala/Scale = $\frac{7.2}{1.2} = \frac{1}{n}$

$n = \frac{1}{6}$

(ii) $SR = \sqrt{3^2 + 7.2^2} \text{ cm} = \sqrt{60.84} = 7.8$ cm
 Perimeter trapezium dalam lukisan
Perimeter of trapezium in drawing
 $= 7.2 + 5 + 8 + 7.8 = 28$ cm

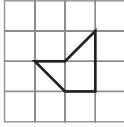
$$\text{Skala/Scale} = \frac{6}{1} = \frac{28}{p}$$

Perimeter sebenar/Actual perimeter,

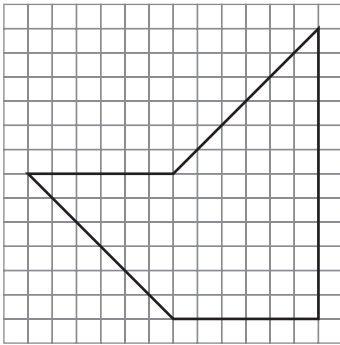
$$p = \frac{28}{\frac{6}{1}}$$

$$= 4\frac{2}{3} \text{ cm}$$

(c) (i)



(ii)



2 (a) (i) $\text{Skala/Scale} = \frac{4.5}{900\,000} = \frac{1}{200\,000}$
 $= 1 : 200\,000$

(ii) Panjang sungai pada peta
Length of river on the map

$$= \frac{2\,500\,000}{200\,000}$$

$$= 12.5 \text{ cm}$$

(b) (i) $\text{Skala/Scale} = \frac{6}{48} = \frac{1}{8}$
 $n = 8$

(ii) Luas segi tiga PQR
Area of triangle PQR

$$= \frac{2\,880}{8^2}$$

$$= 45 \text{ cm}^2$$

$$\frac{1}{2} \times QR \times 6 = 45$$

$$QR = 15 \text{ cm}$$

(c) (i) $\text{Skala/Scale} = \frac{14}{2\,100} = \frac{1}{150}$
 $= 1 : 150$

(ii) Dimensi bilik terkecil (III)
Dimensions of the smallest room (III)

$$= (4 \times 150) \text{ cm} \times (4 \times 150) \text{ cm}$$

$$= 6 \text{ m} \times 6 \text{ m}$$

(iii) Beza di antara luas sebenar bilik II dan bilik IV

Difference between the actual areas of room II and room IV

$$= (20 \times 150^2) - (18 \times 150^2) \text{ cm}^2$$

$$= 45\,000 \text{ cm}^2$$

$$= 4.5 \text{ m}^2$$