Nama: _____ Tarikh: _____

Praktis 11

BAB 11
Transformasi Isometri

Hal. Buku Teks: 206 – 243

Jawab **semua** soalan.
Answer **all** *questions.*

Bahagian A

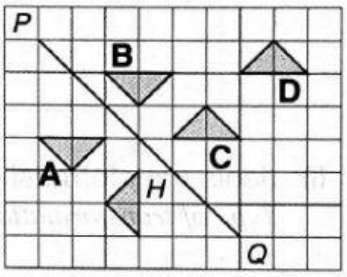
1. Antara berikut, yang manakah transformasi isometri?
Which of the following is isometric transformation?
A Bulatan / *Circle*
B Putaran / *Rotation*
C Sinaran / *Radiation*
D Kecerunan / *Gradient*

2. Apakah nama bagi bentuk asal sebelum transformasi berlaku?
What is the name of the original shape before the transformation occurs?
A Imej / *Image*
B Objek / *Object*
C Bulatan / *Circle*
D Kitaran / *Rotation*

3. Diberi koordinat $A(3, 5)$ di bawah translasi $\begin{pmatrix} 2 \\ -1 \end{pmatrix}$. Nyatakan koordinat A'.
Given the coordinate $A(3, 5)$ under a translation $\begin{pmatrix} 2 \\ -1 \end{pmatrix}$. State the coordinate of A'.
A (1, 5)
B (3, 2)
C (4, 1)
D (5, 4)

4. Diberi $S'(5, 8)$ ialah imej kepada $S(2, 4)$. Nyatakan vektor translasi tersebut.
Given $S'(5, 8)$ is the image of $S(2, 4)$. State the vector translation.
A $\begin{pmatrix} 1 \\ 4 \end{pmatrix}$ **B** $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$
C $\begin{pmatrix} 3 \\ 4 \end{pmatrix}$ **D** $\begin{pmatrix} 5 \\ 3 \end{pmatrix}$

5. Rajah berikut menunjukkan PQ ialah garis lurus.
The following diagram shows PQ is a straight line.



Tentukan imej bagi segi tiga H di bawah pantulan pada garis PQ.
Determine the image of triangle H under a reflection in the line PQ.

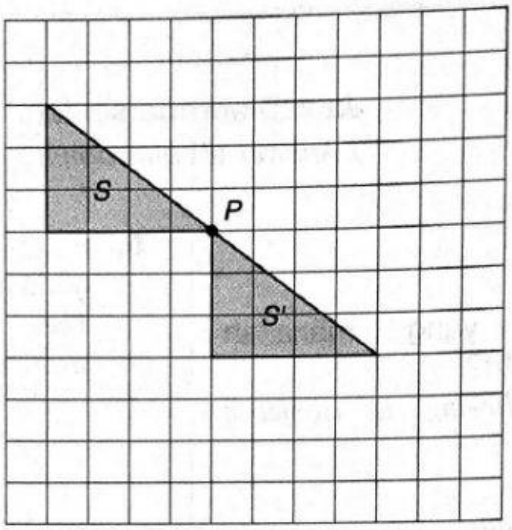
6. Tentukan koordinat imej P' bagi titik $P(2, 4)$ di bawah satu putaran 90° ikut arah jam pada tempat asalan?
Determine the coordinate of image P' for point $P(2, 4)$ under a rotation 90° clockwise at the origin.
A $P'(4, -2)$
B $P'(5, 2)$
C $P'(8, 2)$
D $P'(8, 4)$

7. Apakah koordinat imej bagi $A(-3, 6)$ di bawah putaran 180° pada asalan?
What is the coordinate of image of $A(-3, 6)$ under a rotation 180° at origin?
A (–3, –6)
B (–3, 6)
C (3, –6)
D (3, 6)

LIVEWORKSHEETS

Bahagian B

1. (a) S' ialah imej kepada S di bawah satu penjelmaan. Kenal pasti
S' is the image of S under a transformation. Identify



(i) Jenis transformasi
Type of transformation

_____

(ii) Pusat transformasi
Centre of transformation

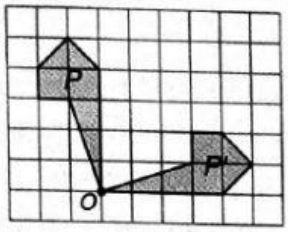
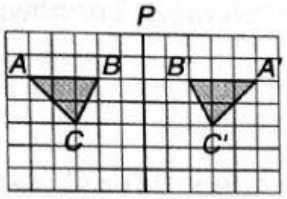
_____

(b) Lengkapkan jadual yang berikut.
Complete the following table.

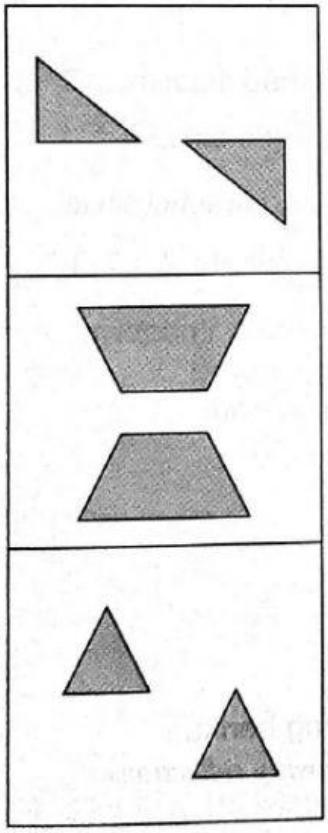
	Koordinat objek *Coordinate of object*	Koordinat imej *Coordinate of image*	Translasi *Translation*
(i)	$P(4, 8)$	$P'(7, 10)$	
(ii)	$Q(3, -5)$	$Q'(3, -6)$	
(iii)	$R(2, 5)$	$R'(4, 1)$	
(iv)	$S(1, -2)$	$S'(5, -7)$	

LIVEWORKSHEETS

2. (a) Tulis Benar pada transformasi yang betul dan Palsu pada transformasi yang salah.
Write True for the correct transformation and False for the incorrect transformation.

	Rajah *Diagram*	Transformasi *Transformation*	Benar atau Palsu *True or False*
(i)		Putaran *Rotation*	
(ii)		Translasi *Translation*	

(b) Padankan yang berikut.
Match yang following.



Pantulan *Reflection*

Putaran *Rotation*

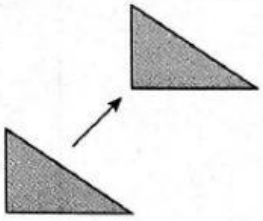
Translasi *Translation*

LIVEWORKSHEETS

Bahagian C

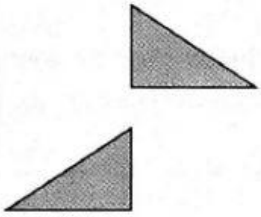
3. (a) Nyatakan sama ada setiap penjelmaan berikut ialah translasi, pantulan atau putaran.
State whether each of the transformation are translation, reflection or rotation.

(i)



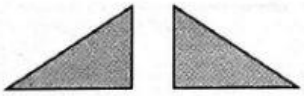
Jawapan / *Answer* :

(ii)



Jawapan / *Answer* :

(iii)



Jawapan / *Answer* :

(b) Cari koordinat bagi imej $K(5, -3)$ di bawah pantulan yang berikut.
Find the coordinates of the image of $K(5, -3)$ under the following reflections.

(i) Pantulan pada paksi-x.
Reflection on x-axis.

Jawapan / *Answer* :

LIVEWORKSHEETS