

TRANSFORMASI GEOMETRI
TRANSLASI DAN REFLEKSI

1) TRANSLASI

$A(x, y) \rightarrow A'(x + a, y + b)$

A(2, 7)	$T\left(\begin{smallmatrix} 3 \\ -5 \end{smallmatrix}\right)$	
B(-2, 8)		
C(3, -10)	$T\left(\begin{smallmatrix} -2 \\ 1 \end{smallmatrix}\right)$	
D(-5, -6)		
P(4, -6)	$T\left(\begin{smallmatrix} -9 \\ 3 \end{smallmatrix}\right)$	
Q(-2, 6)		

2) REFLEKSI

- Refleksi terhadap sumbu x
 $A(x, y) \rightarrow A'(x, -y)$

A(2, -9)	$\xrightarrow{\text{sumbu } x}$	
B(-4, 3)		
C(-7, -2)		
M(4, -5)		
N(-10, 8)		
P(-15, -6)		

- Refleksi terhadap sumbu y
 $A(x, y) \rightarrow A'(-x, y)$

P(4, -3)	$\xrightarrow{\text{sumbu } y}$	
Q(-10, 7)		
R(3, 2)		
K(6, -10)		
L(-18, 9)		
M(11, 15)		

- Refleksi terhadap garis $y = x$
 $A(x, y) \rightarrow A'(y, x)$

K(5, -8)	$\xrightarrow{\text{garis } y = x}$	
L(-6, 10)		
M(11, 18)		
A(6, -2)		
B(-10, 7)		
C(10, 9)		

- Refleksi terhadap garis $y = -x$
 $A(x, y) \rightarrow A'(-y, -x)$

X(4, -6)	$\xrightarrow{\text{garis } y = -x}$	
Y(-7, 4)		
Z(3, 10)		
E(2, -4)		
F(-9, 12)		
G(5, 2)		

- Refleksi terhadap garis $x = h$
 $A(x, y) \rightarrow A'(2h - x, y)$

A(9, -4)	$\xrightarrow{\text{garis } x = -2}$	
B(-1, 12)		
C(-5, 10)	$\xrightarrow{\text{garis } x = 4}$	
D(4, 8)		
E(-5, 12)	$\xrightarrow{\text{garis } x = -\frac{1}{2}}$	
F(10, 18)		

- Refleksi terhadap garis $y = k$
 $A(x, y) \rightarrow A'(x, 2k - y)$

$A(7, -12)$	$\xrightarrow{\text{garis } y=-4}$	
$B(-5, 2)$		
$C(17, 5)$	$\xrightarrow{\text{garis } y=7}$	
$D(-4, -1)$		
$E(6, -2)$	$\xrightarrow{\text{garis } y=-\frac{1}{2}}$	
$F(-8, 4)$		

- Refleksi terhadap titik pusat $O(0,0)$
 $A(x, y) \rightarrow A'(-x, -y)$

$X(5, -12)$	$\xrightarrow{O(0,0)}$	
$M(-4, 9)$		
$Z(13, 24)$		
$N(11, -22)$		
$P(-5, 21)$		
$R(13, 4)$		