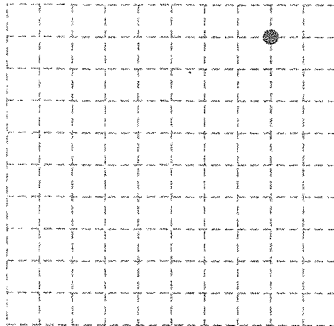


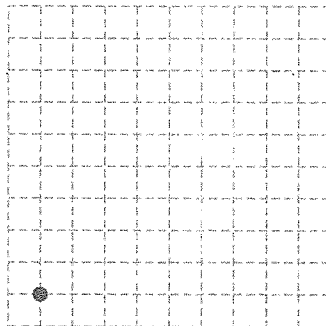
**Translation of a Point**

Graph the new position of each point using the translation given.

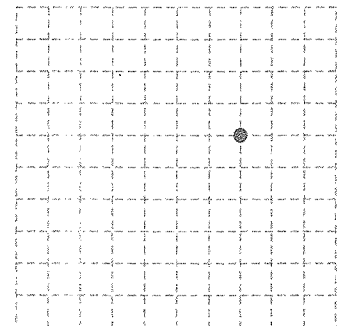
1) 6 units down and 6 units left



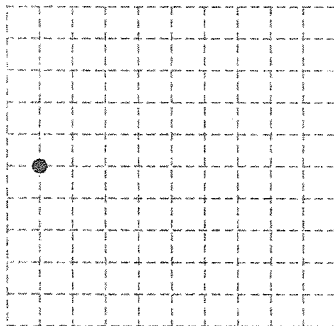
2) 8 units up and 4 units right



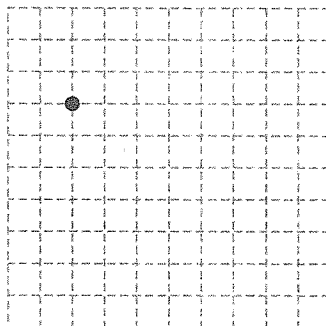
3) 3 units left



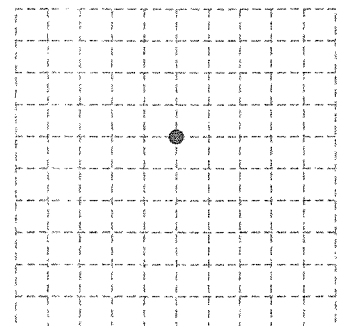
4) 2 units up and 8 units right



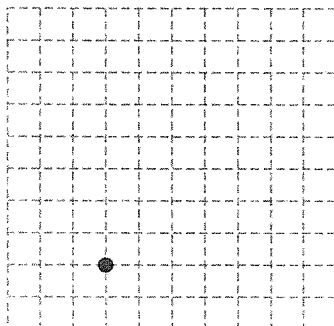
5) 7 units right and 6 units down



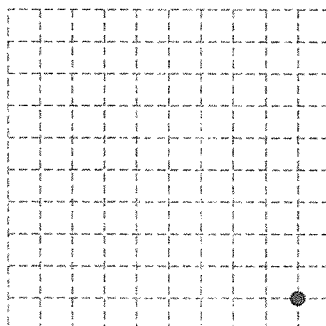
6) 1 unit down and 3 units right



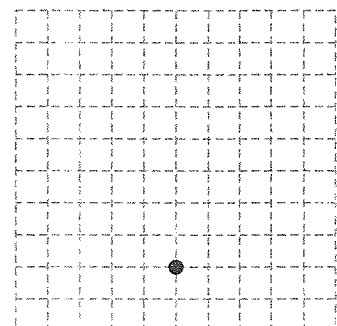
7) 4 units right



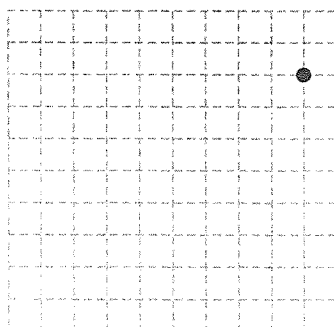
8) 2 units left and 7 units up



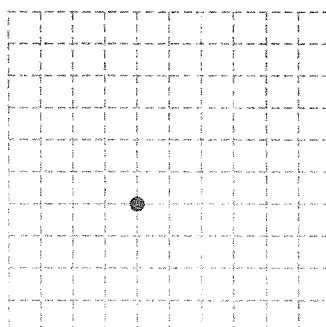
9) 5 units up and 4 units left



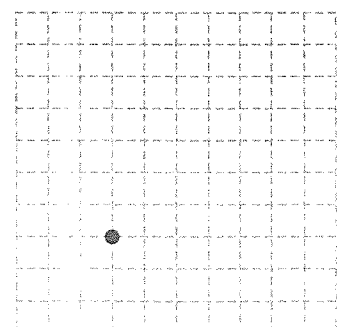
10) 8 units left and 7 units down



11) 1 unit down and 3 units left



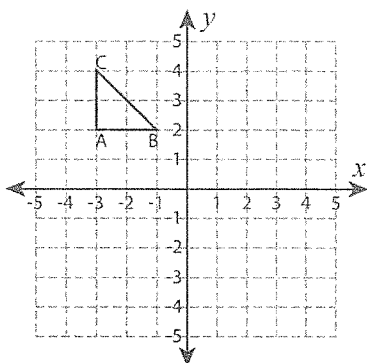
12) 6 units right and 2 units up



**Write the New Coordinates**

Graph the image of each figure after the given translation. Also write the coordinates of the image.

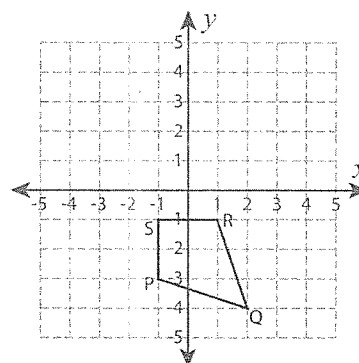
1) 1 unit down and 4 units right



A': \_\_\_\_\_, B': \_\_\_\_\_

C': \_\_\_\_\_

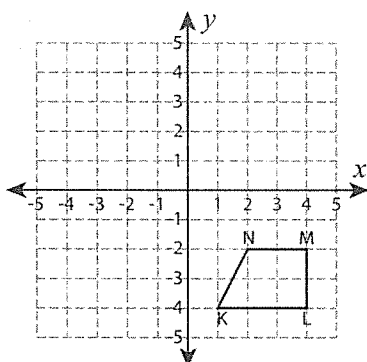
2) 2 units right and 5 units up



P': \_\_\_\_\_, Q': \_\_\_\_\_

R': \_\_\_\_\_, S': \_\_\_\_\_

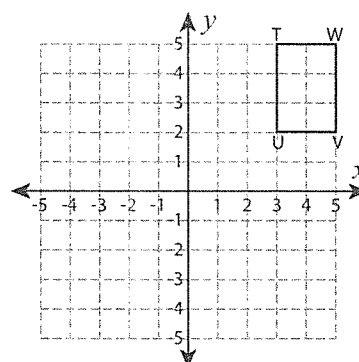
3) 6 units up and 6 units left



K': \_\_\_\_\_, L': \_\_\_\_\_

M': \_\_\_\_\_, N': \_\_\_\_\_

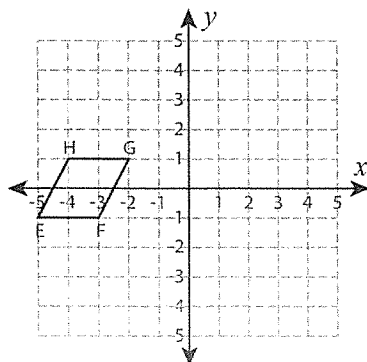
4) 8 units left and 7 units down



T': \_\_\_\_\_, U': \_\_\_\_\_

V': \_\_\_\_\_, W': \_\_\_\_\_

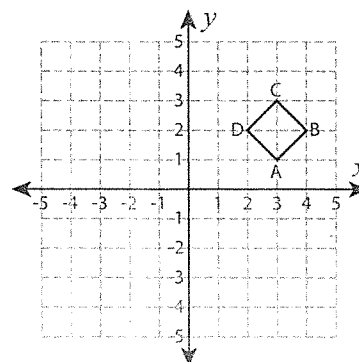
5) 7 units right



E': \_\_\_\_\_, F': \_\_\_\_\_

G': \_\_\_\_\_, H': \_\_\_\_\_

6) 4 units down and 6 units left



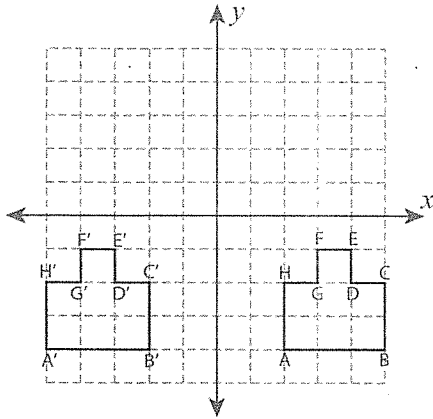
A': \_\_\_\_\_, B': \_\_\_\_\_

C': \_\_\_\_\_, D': \_\_\_\_\_

# Translation of Shapes

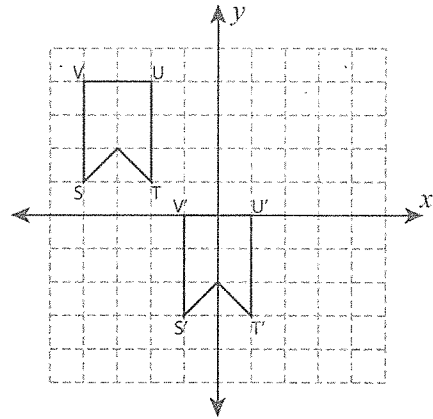
Write a rule to describe each translation.

1)



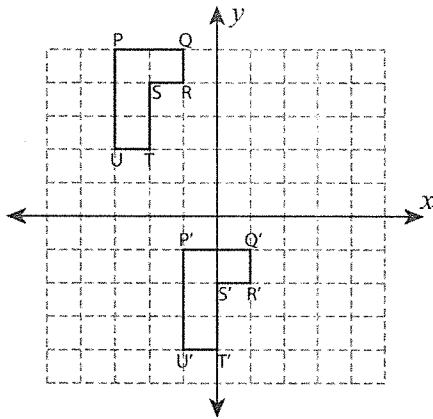
\_\_\_\_\_

2)



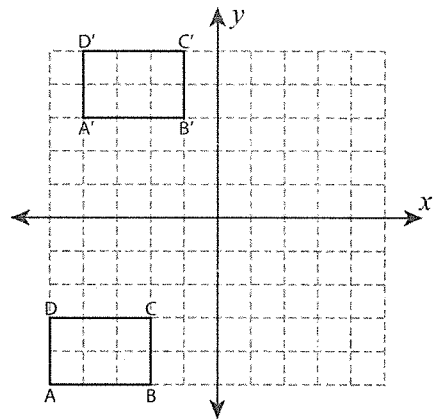
\_\_\_\_\_

3)



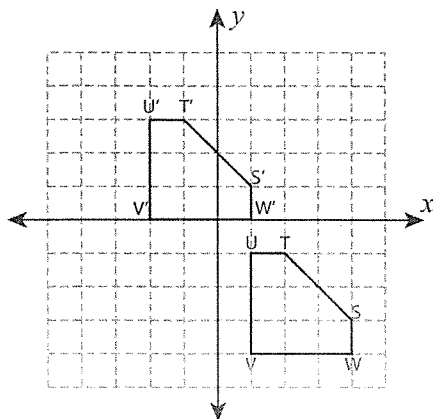
\_\_\_\_\_

4)



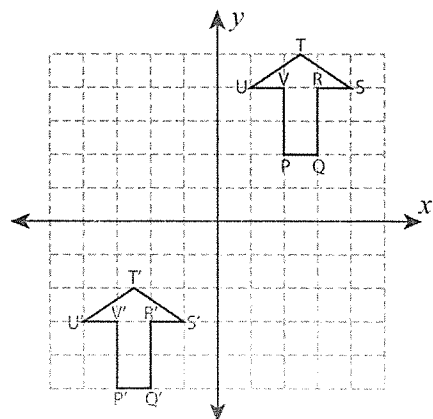
\_\_\_\_\_

5)



\_\_\_\_\_

6)



\_\_\_\_\_

**Write the New Coordinates**

Sheet 1

Write the coordinates obtained after the given translation.

1)  $A(-5, 3), B(-3, 3), C(-2, 5), D(-5, 4)$

8 units down and 7 units right

$A': \underline{\hspace{2cm}}, B': \underline{\hspace{2cm}}$

$C': \underline{\hspace{2cm}}, D': \underline{\hspace{2cm}}$

3)  $K(-5, -4), L(-2, -4), M(-2, -2), N(-5, -2)$

4 units right and 3 units up

$K': \underline{\hspace{2cm}}, L': \underline{\hspace{2cm}}$

$M': \underline{\hspace{2cm}}, N': \underline{\hspace{2cm}}$

5)  $E(1, 2), F(3, 2), G(4, 4), H(2, 4)$

5 units down and 1 unit left

$E': \underline{\hspace{2cm}}, F': \underline{\hspace{2cm}}$

$G': \underline{\hspace{2cm}}, H': \underline{\hspace{2cm}}$

7)  $T(-5, 2), U(-1, 2), V(-2, 4), W(-4, 4)$

6 units right and 6 units down

$T': \underline{\hspace{2cm}}, U': \underline{\hspace{2cm}}$

$V': \underline{\hspace{2cm}}, W': \underline{\hspace{2cm}}$

2)  $P(2, 1), Q(4, 1), R(5, 3), S(2, 3)$

2 units up and 5 units left

$P': \underline{\hspace{2cm}}, Q': \underline{\hspace{2cm}}$

$R': \underline{\hspace{2cm}}, S': \underline{\hspace{2cm}}$

4)  $S(3, -5), T(4, -5), U(5, -3), V(2, -3)$

7 units left and 6 units up

$S': \underline{\hspace{2cm}}, T': \underline{\hspace{2cm}}$

$U': \underline{\hspace{2cm}}, V': \underline{\hspace{2cm}}$

6)  $J(-3, -5), K(-1, -5), L(-1, -3)$

8 units up and 3 units right

$J': \underline{\hspace{2cm}}, K': \underline{\hspace{2cm}}$

$L': \underline{\hspace{2cm}}$

8)  $A(0, 2), B(1, 4), C(0, 3), D(-1, 4)$

4 units left and 1 unit down

$A': \underline{\hspace{2cm}}, B': \underline{\hspace{2cm}}$

$C': \underline{\hspace{2cm}}, D': \underline{\hspace{2cm}}$