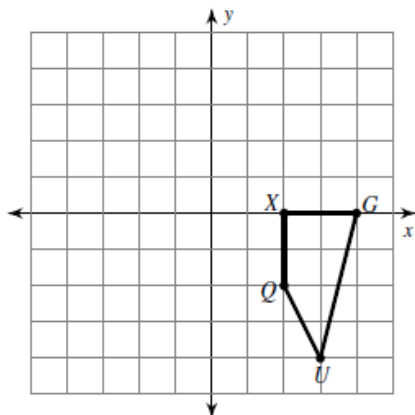


12.1 Translations Practice

State the correct **coordinate notation** for each translation, **graph** the image (including the prime notation).

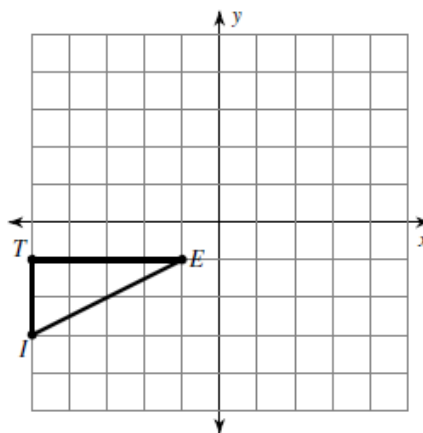
1. Translation: 1 unit left

(_____ , _____) \Rightarrow (_____ , _____)



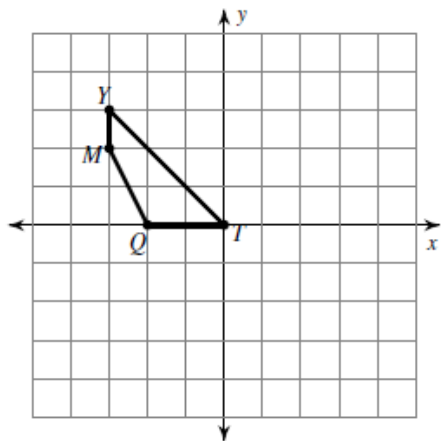
2. Translation: 1 unit right and 2 units down

(_____ , _____) \Rightarrow (_____ , _____)



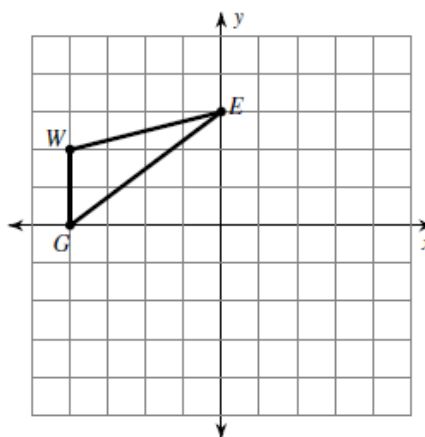
3. Translation: 3 unit right

(_____ , _____) \Rightarrow (_____ , _____)



4. Translation: 1 unit right and 2 units down

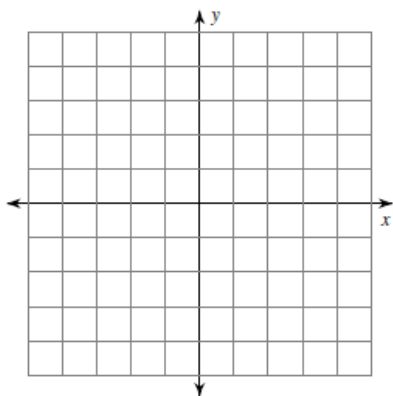
(_____ , _____) \Rightarrow (_____ , _____)



5. Translation: 5 units up

(_____ , _____) \Rightarrow (_____ , _____)

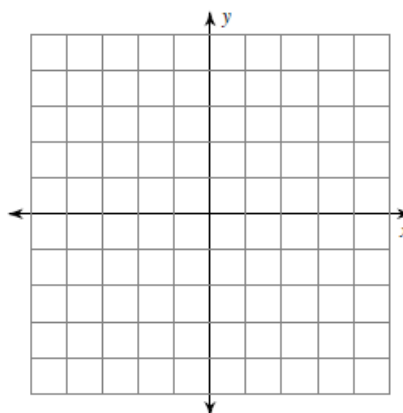
$U(-3, -4)$, $M(-1, -1)$, $L(-2, -5)$



6. Translation: 3 units up

(_____ , _____) \Rightarrow (_____ , _____)

$R(-4, -3)$, $D(-4, 0)$, $L(0, 0)$



State the correct coordinate notation for each translation and then find the coordinates of the vertices of each figure after the given transformation.

7. Translation: 2 units left and 1 unit down

Q(0, -1), D(-2, 2), V(2, 4)

(____ , ____) \rightarrow (____ , ____)

Q'(____, ____) D'(____, ____)

V'(____, ____)

8. Translation: 2 units down

D(-4, 1), A(-2, 5), S(-1, 4)

(____ , ____) \rightarrow (____ , ____)

D'(____, ____) A'(____, ____)

S'(____, ____)

9. Translation: 4 units left and 4 units up

J(-1, -2), A(-1, 0), N(3, -3)

(____ , ____) \rightarrow (____ , ____)

J'(____, ____) A'(____, ____)

N'(____, ____)

10. Translation: 3 units right and 4 units up

Z(-4, -3), I(-2, -2), V(-2, -4)

(____ , ____) \rightarrow (____ , ____)

Z'(____, ____) I'(____, ____)

V'(____, ____)