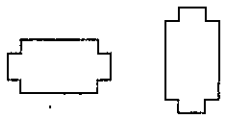
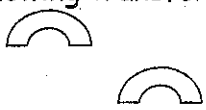
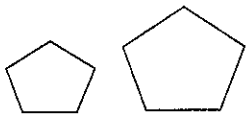
Geometry
Section 12.2
Worksheet

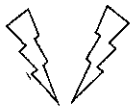
Name_____
Date_____ Hr_____

Determine if each of the following transformation is a translation.

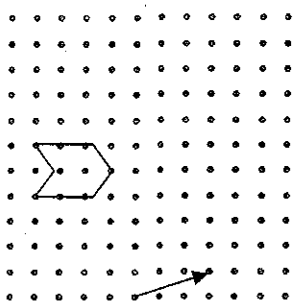
1. 

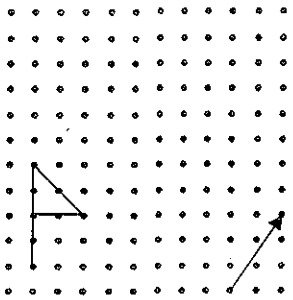
2. 

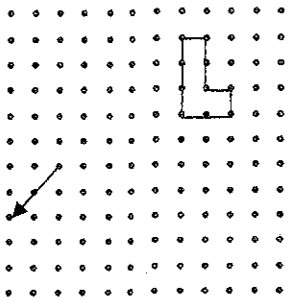
3. 

4. 

Translate the figure using the vector.

5. 

6. 

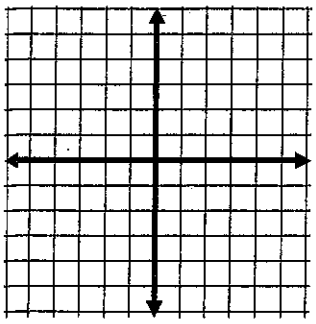
7. 

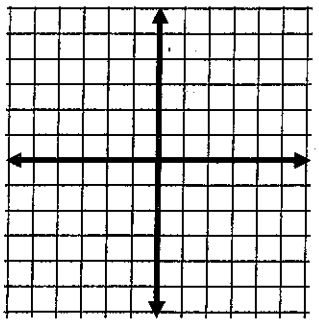
Translate the figure with the given vertices along the given vector.

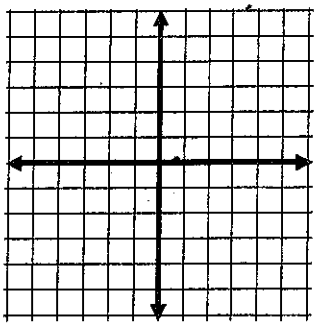
8. A(-4, -4), B(-2, -3), C(-1, 3)
vector $\langle 5,-1 \rangle$

9. R(-3, 1), S(-2, 3), T(2, 3)
vector $\langle 0,-4 \rangle$

10. F(-2, -2), U(-1, 2), N(-1, -2)
vector $\langle 3,2 \rangle$

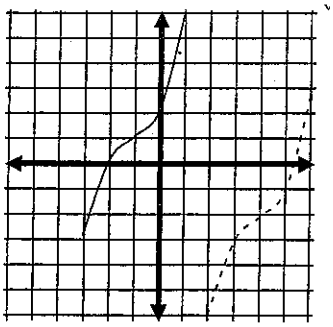




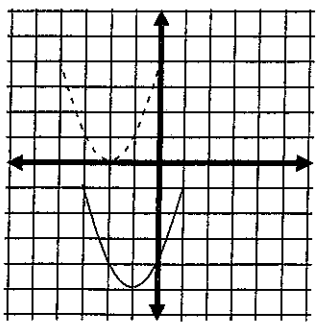


Name the vector associated with the translation of the solid preimage to the dotted image.

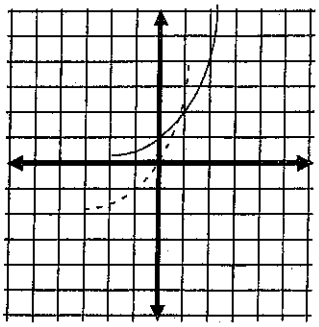
11.



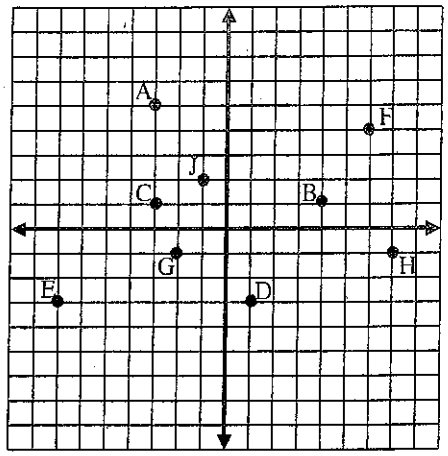
12.



13.



Use the graph on the right to answer the following.



14. $\langle 2,1 \rangle$ maps $C \rightarrow$ _____

15. What vector maps $A \rightarrow J$?_____

16. _____ $\rightarrow$ _____shows a $\langle 2,3 \rangle$ mapping

17. What vector maps $C \rightarrow E$?_____

18. $\langle 5,2 \rangle$ maps _____ $\rightarrow G$

19. $\langle 3,-1 \rangle$ followed by $\langle -1,2 \rangle$ maps $C \rightarrow$ _____

Name the vector used to map the preimage to the image.

20. (5, 2) $\rightarrow$ (-2, 1) _____

21. (-3, 7) $\rightarrow$ (-5, 3) _____

22. (8, -3) $\rightarrow$ (5, -3) _____

23. (-5, -1) $\rightarrow$ (3, 4) _____

Name the single translation vector that would map the preimage to the image for the composite transformations.

25. $\langle 5,-3 \rangle$ followed by $\langle 2,8 \rangle$ _____

26. $\langle 1,5 \rangle$ followed by $\langle -3,-2 \rangle$ _____

27. $\langle -4,6 \rangle$ followed by $\langle 5,-9 \rangle$ _____

28. $\langle -3,5 \rangle$ followed by $\langle 3,-8 \rangle$ _____

29. $\langle 8,-2 \rangle$ followed by $\langle -2,4 \rangle$ followed by $\langle -4,0 \rangle$_____

30. What is the image of P(1,3) when it is translated along the vector $\langle -3,5 \rangle$?

A. (-2, 8) B (0, 6) C (1, 3) D (0, 4)

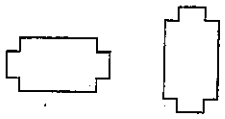
31. After a translation, the image of A(-6, -2) is B(-4, -4). What is the image of the point C(3, -1) after this translation?

A. (-5, 1) B (5, -3) C (5, 1) D (-5, -3)

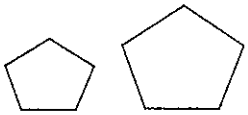
Geometry
Section 12.2
Worksheet

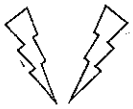
Name Key
Date _____ Hr _____

Determine if each of the following transformation is a translation.

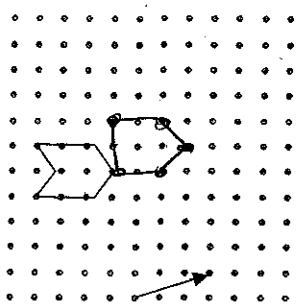
1. 
NO

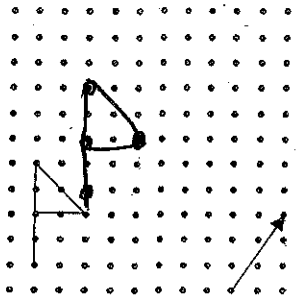
2. 
Yes

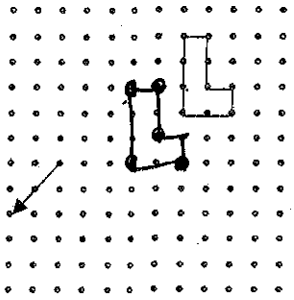
3. 
NO

4. 
NO

Translate the figure using the vector.

5. 
$\langle 3, 1 \rangle$

6. 
$\langle 2, 3 \rangle$

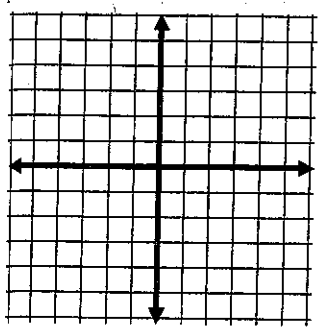
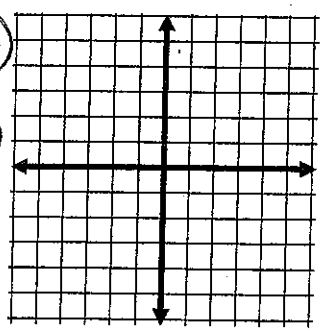
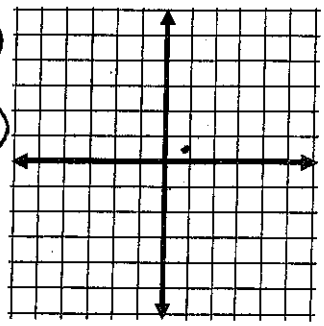
7. 
$\langle -2, -2 \rangle$

Translate the figure with the given vertices along the given vector:

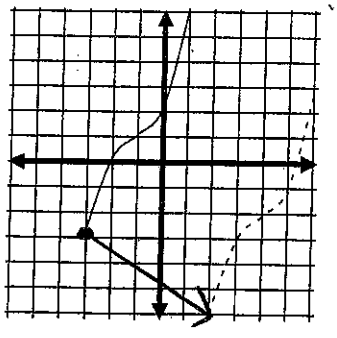
8. A(-4, -4), B(-2, -3), C(-1, 3)
vector $\langle 5, -1 \rangle$
A'(1, -5)
B'(3, -4)
C'(4, 2)

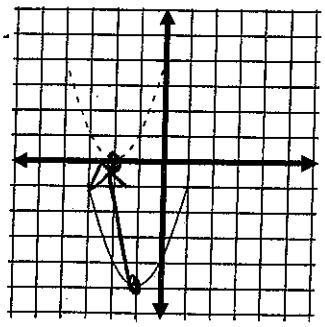
9. R(-3, 1), S(-2, 3), T(2, 3)
vector $\langle 0, -4 \rangle$
R'(-3, -3)
S'(-2, -1)
T'(2, -1)

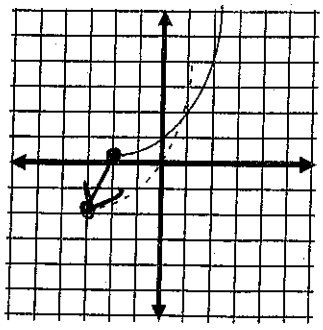
10. F(-2, -2), U(-1, 2), N(-1, -2)
vector $\langle 3, 2 \rangle$
F'(1, 0)
U'(2, 4)
N'(2, 0)

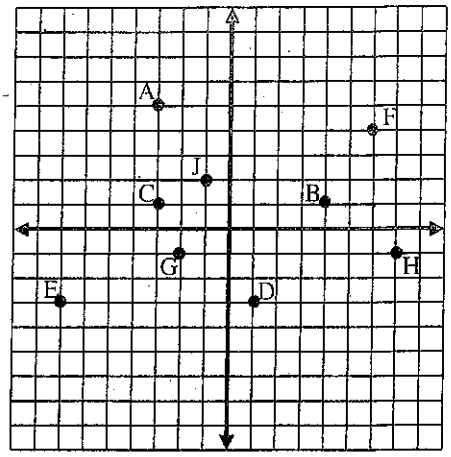
Name the vector associated with the translation of the solid preimage to the dotted image.

11. 
$\langle 5, -3 \rangle$

12. 
$\langle -1, 5 \rangle$

13. 
$\langle -1, -2 \rangle$

Use the graph on the right to answer the following.



14. $\langle 2,1 \rangle$ maps C → J

15. What vector maps A → J? $\langle 2, -3 \rangle$

16. B → F shows a $\langle 2,3 \rangle$ mapping

17. What vector maps C → E? $\langle -4, -4 \rangle$

18. $\langle 5,2 \rangle$ maps E → G

19. $\langle 3,-1 \rangle$ followed by $\langle -1,2 \rangle$ maps C → J

$\langle 2, 1 \rangle$

Name the vector used to map the preimage to the image.

20. (5, 2) → (-2, 1) $\langle -7, -1 \rangle$

21. (-3, 7) → (-5, 3) $\langle -2, -4 \rangle$

22. (8, -3) → (5, -3) $\langle -3, 0 \rangle$

23. (-5, -1) → (3, 4) $\langle 8, 5 \rangle$

Name the single translation vector that would map the preimage to the image for the composite transformations.

25. $\langle 5,-3 \rangle$ followed by $\langle 2,8 \rangle$ $\langle 7, 5 \rangle$

26. $\langle 1,5 \rangle$ followed by $\langle -3,-2 \rangle$ $\langle -2, 3 \rangle$

27. $\langle -4,6 \rangle$ followed by $\langle 5,-9 \rangle$ $\langle 1, -3 \rangle$

28. $\langle -3,5 \rangle$ followed by $\langle 3,-8 \rangle$ $\langle 0, -3 \rangle$

29. $\langle 8,-2 \rangle$ followed by $\langle -2,4 \rangle$ followed by $\langle -4,0 \rangle$ $\langle 2, 2 \rangle$

30. What is the image of P(1,3) when it is translated along the vector $\langle -3,5 \rangle$?

A. (-2, 8) B (0, 6) C (1, 3) D (0, 4)

31. After a translation, the image of A(-6, -2) is B(-4, -4). What is the image of the point C(3, -1) after this translation? $\langle 2, -2 \rangle$

A. (-5, 1) B (5, -3) C (5, 1) D (-5, -3)