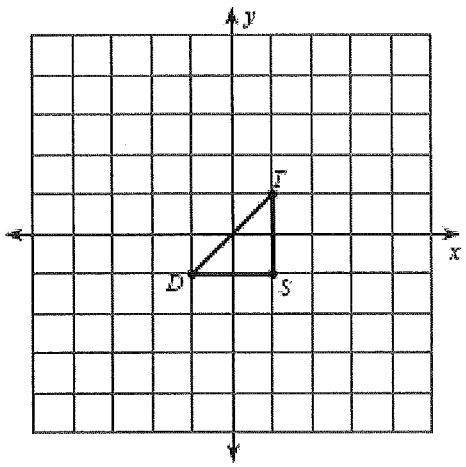
Name _____ Period _____ Date _____

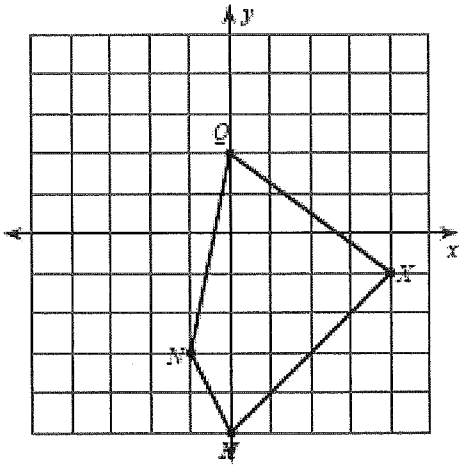
Dilations Practice

Graph the image of the figure using the transformation given. Assume all dilations are from the origin unless otherwise noted.

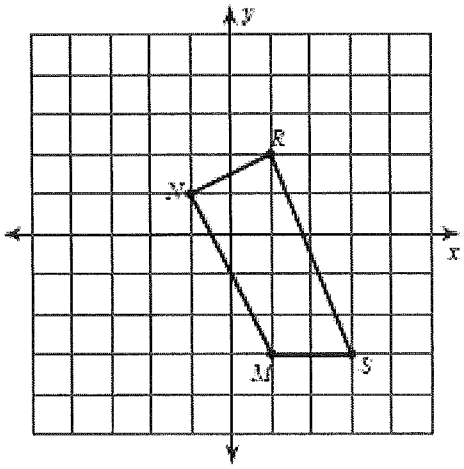
1. Dilation of 1.5



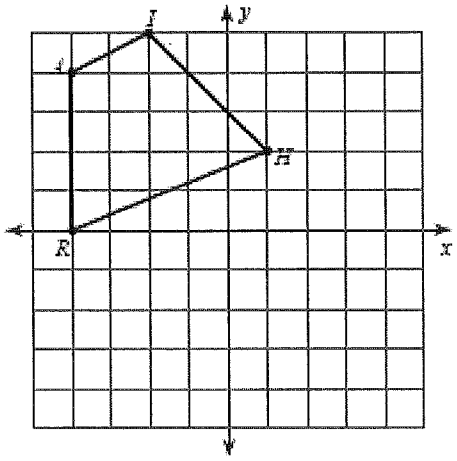
2. Dilation of 0.5



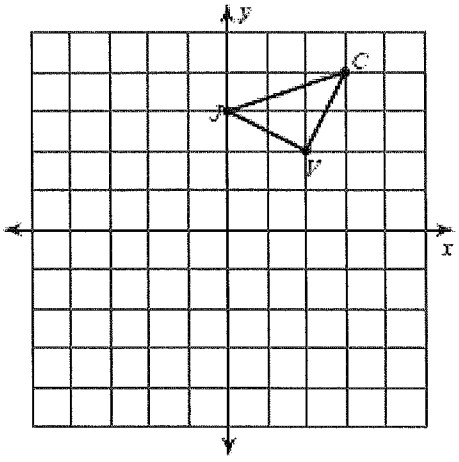
3. Dilation of 1.5



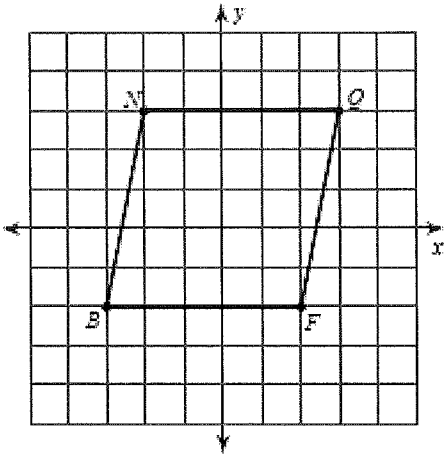
4. Dilation of 0.5



5. Dilation of ¼

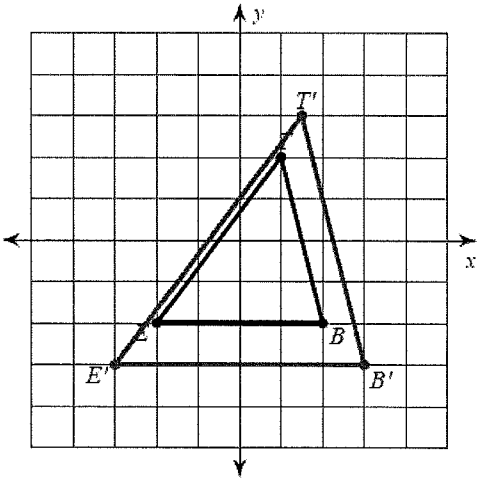


6. Dilation of 1.5

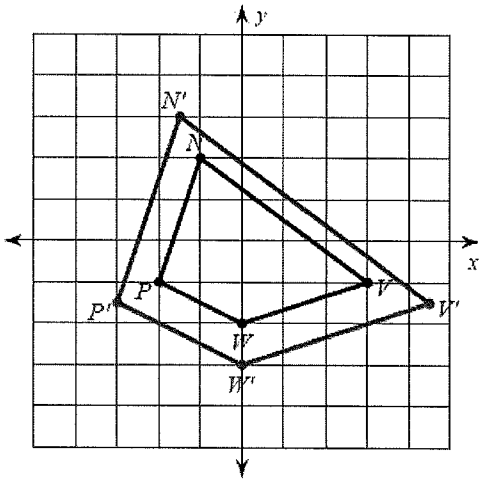


Write a rule to describe each transformation.

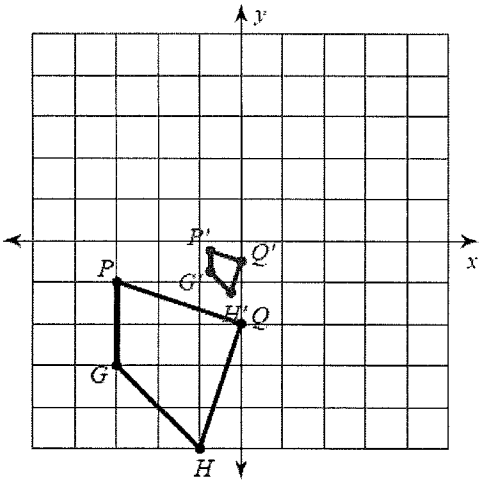
7.



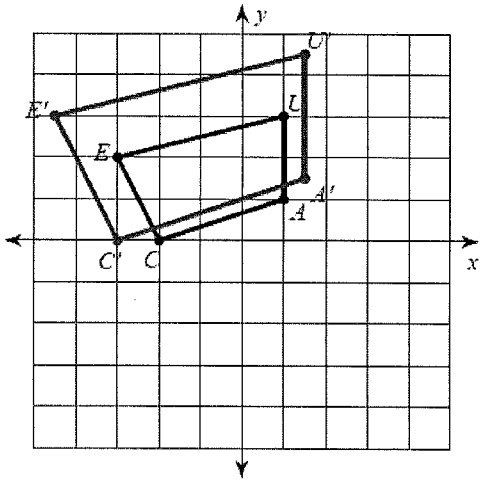
8.



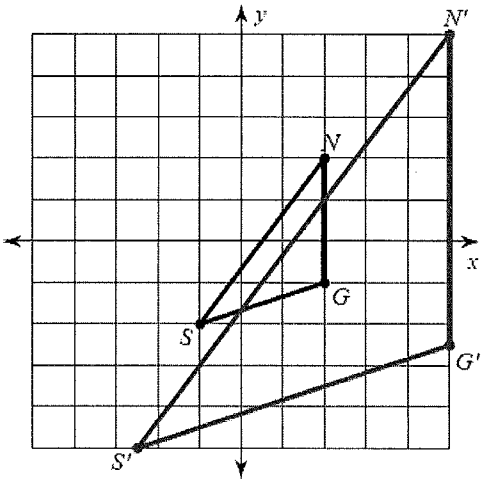
9.



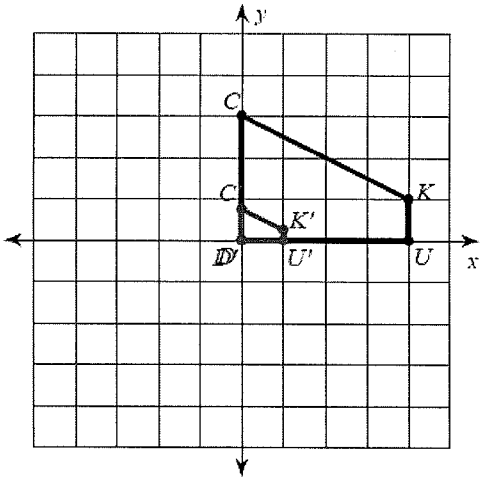
10.



11.



12.



Write a rule to describe each transformation.

13. U(−2, −1), K(0, 2), F(2, −2) to U'(−3, −1.5), K'(0, 3), F'(3, −3)

14. V(−1, −2), K(−1, 3), Y(1, 0) to V'(−1.5, −3), K'(−1.5, 4.5), Y'(1.5, 0)

15. K(−1, −2), U(−2, 2), V(2, 2), Q(2, −1) to K'(−2, −4), U'(−4, 4), V'(4, 4), Q'(4, −2)

16. N(−4, 1), T(−5, 3), J(−4, 3), C(−1, 0) to N'(−1, 0.25), T'(−1.25, 0.75), J'(−1, 0.75), C'(−0.25, 0)

17. K(−1, 0), N(−2, 2), H(3, 3), T(3, −2) to K'(−1.5, 0), N'(−3, 3), H'(4.5, 4.5), T'(4.5, −3)

Write the coordinates of the vertices after the given transformation.

18. Dilation of 4
N(0, 1), O(1, 1), P(0, 8)

19. Dilation of 1.5
V(−2, −2), I(1, 2), F(2, 0)

20. Dilation of ½
U(3, 2), C(4, 4), E(5, 2)

21. Dilation of 2
H(−1, −2), A(−2, 2), W(2, 2)

22. Dilation of ¼
W(−4, −5), X(−5, −1), T(−3, 0)

23. Dilation of 5
Q(−3, −3), M(0, −1), H(1, −3)

24. Dilation of 3
Q(−3, −3), M(0, −1), H(1, −3)

25. Dilation of 5/2
C(−1, −2), V(−2, 2), N(2, 0)