

Name _____

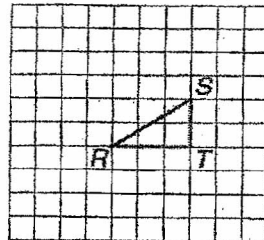
Class _____

Math 8 – 3rd six weeks

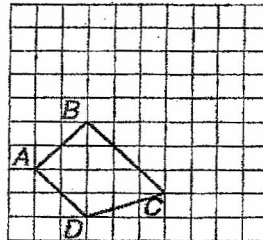
REVIEW FOR SIX WEEK TEST

Draw the image of the figure after the indicated translation.

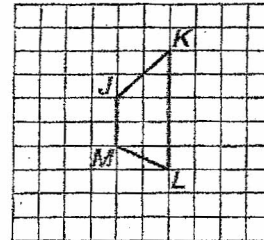
1. 2 units left and 3 units up



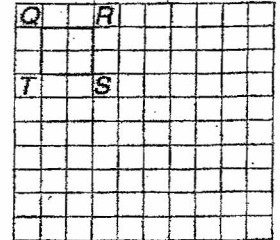
2. 4 units right and 1 unit up



3. 1 unit left and 2 units down

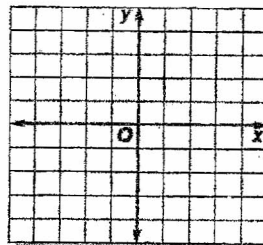


4. 5 units right and 3 units down

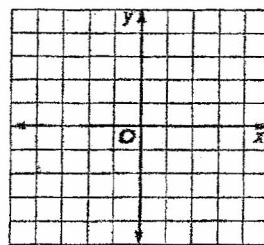


Graph the figure with the given vertices. Then graph the image of the figure after the indicated translation and write the coordinates of its vertices.

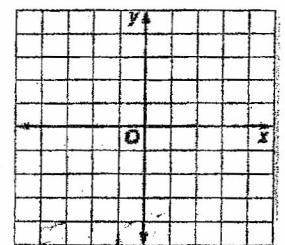
5. triangle ABC with vertices $A(-3, -1)$, $B(-4, -4)$, and $C(-1, -2)$ translated 4 units right and 1 unit up



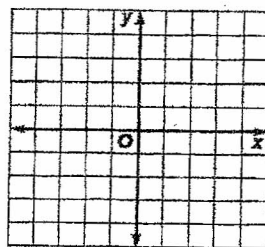
6. triangle XYZ with vertices $X(1, -2)$, $Y(3, -5)$, and $Z(4, 1)$ translated 5 units left and 3 units up



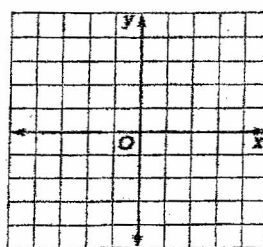
7. triangle EFG with vertices $E(1, 4)$, $F(-1, 1)$, and $G(2, -1)$ translated 3 units left and 1 unit down



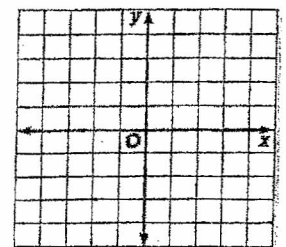
8. rhombus WXYZ with vertices $W(-4, 3)$, $X(-1, 1)$, $Y(2, 3)$, and $Z(-1, 5)$ translated 2 units right and 5 units down



9. rectangle QRST with vertices $Q(-2, -4)$, $R(-2, 1)$, $S(-4, 1)$, and $T(-4, -4)$ translated 3 units right and 3 units up

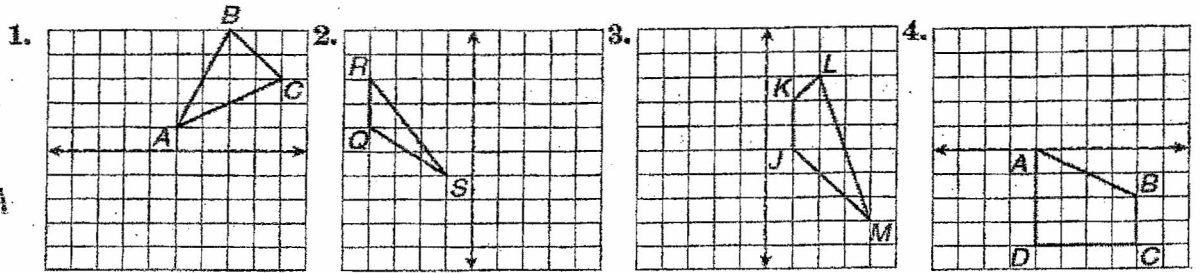


10. trapezoid BCDE with vertices $B(2, -1)$, $C(3, -3)$, $D(-3, -3)$, and $E(0, -1)$ translated 1 unit left and 4 units up



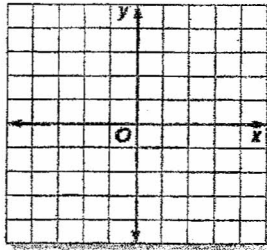
Reflections

Draw the image of the figure after a reflection over the given line.

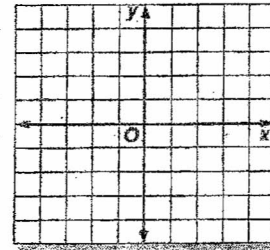


Graph the figure with the given vertices. Then graph the image of the figure after a reflection over the given axis and write the coordinates of its vertices.

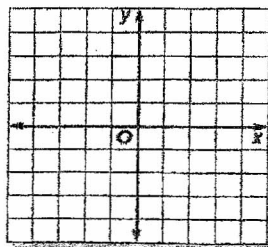
5. triangle ABC with vertices $A(1, 4)$, $B(4, 1)$, and $C(2, 5)$; x -axis



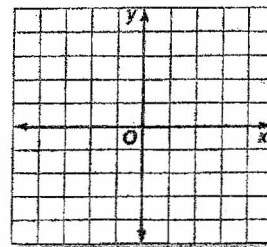
6. triangle DEF with vertices $D(-1, 2)$, $E(-3, 1)$, and $F(-4, 5)$; y -axis



7. trapezoid $WXYZ$ with vertices $W(2, 4)$, $X(2, -2)$, $Y(4, -1)$, and $Z(4, 3)$; y -axis



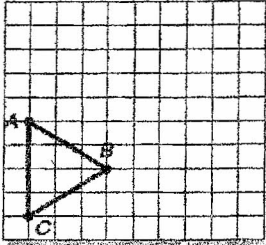
8. rhombus $QRST$ with vertices $Q(-1, 5)$, $R(-4, 3)$, $S(-1, 1)$, and $T(2, 3)$; x -axis



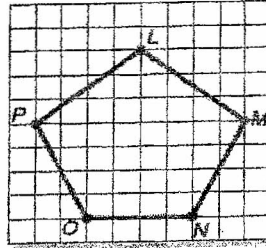
Dilations

Draw the image of the figure after the dilation with the given center and scale factor.

1. center: C , scale factor: 2



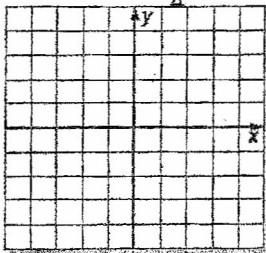
2. center: N , scale factor: $\frac{1}{2}$



Find the coordinates of the vertices of polygon $F'G'H'J'$ after polygon $FGHJ$ is dilated using the given scale factor. Then graph polygon $FGHJ$ and polygon $F'G'H'J'$.

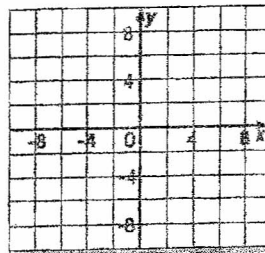
3. $F(-2, 2)$, $G(2, 3)$, $H(3, -2)$, $J(-1, -3)$;

scale factor $\frac{3}{4}$



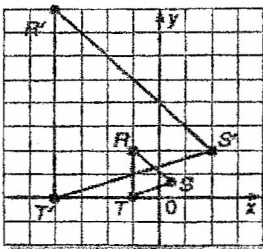
4. $F(-2, 2)$, $G(2, 4)$, $H(3, -3)$, $J(-4, -4)$;

scale factor 2

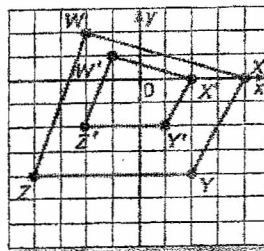


In the exercises below, figure $R'S'T'$ is a dilation of figure RST and figure $W'X'Y'Z'$ is a dilation of figure $WXYZ$. Find the scale factor of each dilation and classify it as an *enlargement* or as a *reduction*.

5.



6.



7. **GLASS BLOWING** The diameter of a vase is now 4 centimeters. If the diameter increases by a factor of $\frac{7}{3}$, what will be the diameter then?

Textbook:

p. 177 #21-31 } odd only
37-47 }

p. 240-241 #7, 8, 11, 13, 15

p. 246-247 #1-6 (~~all~~) all

p. 254 #1-4, 9-14, 15, 17, 19

p. 360 #1, 2, 7, 9, 11, 12, 17, 19
24, 25, 27, 28