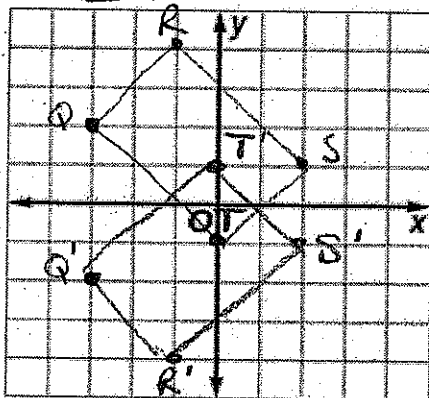


Chapter 9 Review

Target: Use Properties of Chapter 9
to solve problems

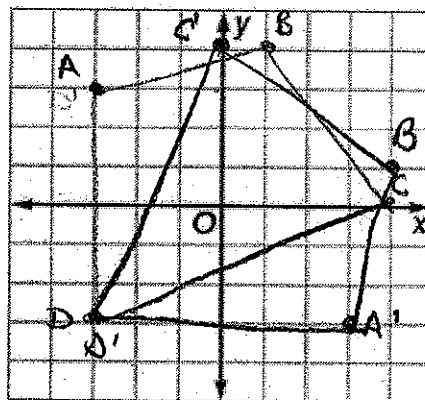
9.1 Reflections

1. rectangle $QRST$ with vertices $Q(-3, 2)$, $R(-1, 4)$, $S(2, 1)$, and $T(0, -1)$ in the x -axis



$Q'(-3, -2)$
 $R'(-1, -4)$
 $S'(2, -1)$
 $T'(0, 1)$

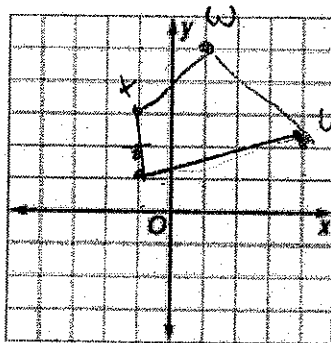
2. quadrilateral $ABCD$ with vertices $A(-3, 3)$, $B(1, 4)$, $C(4, 0)$, and $D(-3, -3)$ in the line $y = x$



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

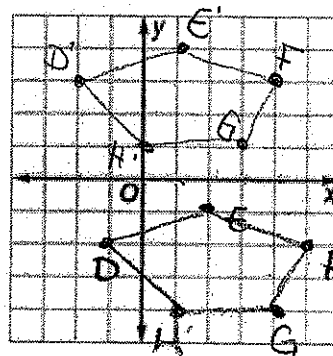
9.2 Translations

3. quadrilateral $TUVX$ with vertices $T(-1, 1)$, $U(4, 2)$, $V(1, 5)$, and $X(-1, 3)$; $(-2, -4)$



$T'(-3, 3)$
 $U'(2, 2)$
 $V'(-1, 1)$
 $X'(-3, -1)$

4. pentagon $DEFGH$ with vertices $D(-1, -2)$, $E(2, -1)$, $F(5, -2)$, $G(4, -4)$, and $H(1, -4)$; $(-1, 5)$

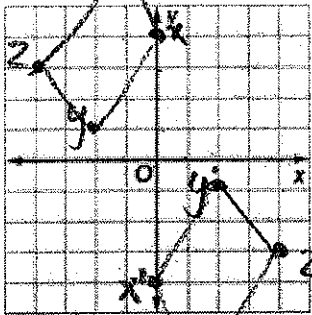


$D'(-2, 3)$
 $E'(1, 4)$
 $F'(4, 3)$
 $G'(3, 1)$
 $H'(0, 1)$

2, -1
1, 2
-1, 2

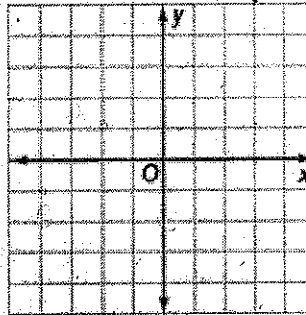
9.3 Rotations

5. quadrilateral $WXYZ$ has vertices $W(-1, 8)$, $X(0, 4)$, $Y(-2, 1)$ and $Z(-4, 3)$; 180°



$W'(1, -8)$
 $X'(0, -4)$
 $Y'(2, -1)$
 $Z'(4, -3)$

6. trapezoid $ABCD$ has vertices $A(9, 0)$, $B(6, -7)$, $C(3, -7)$ and $D(0, 0)$; 270°

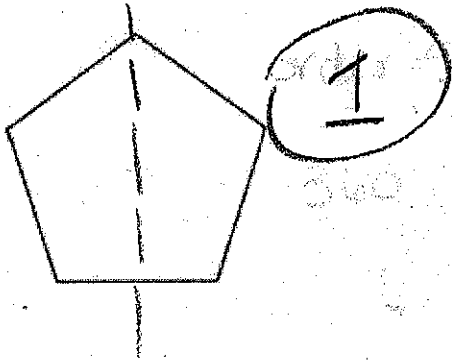


$A'(0, -9)$
 $B'(-7, -6)$
 $C'(-7, -3)$
 $D'(0, 0)$

9.5 Symmetry

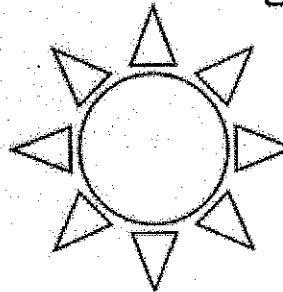
State whether the figure appears to have line symmetry. Write *yes* or *no*. If so, draw all lines of symmetry and state their number.

7.



State whether the figure has rotational symmetry. Write *yes* or *no*. If so, locate the center of symmetry, and state the order and magnitude of symmetry.

8.



order = 8

$$\frac{360}{8}$$

$$45^\circ$$