

Curriculum Outcomes

(SS3) Demonstrate an understanding of similarity of polygons.

(SS4) Draw and interpret scale diagrams of 2-D shapes.

(SS5) Demonstrate an understanding of line and rotation symmetry.

Student Friendly: Reflecting a shape across a line

Apr 20-8:21 AM



SECTION 7.5

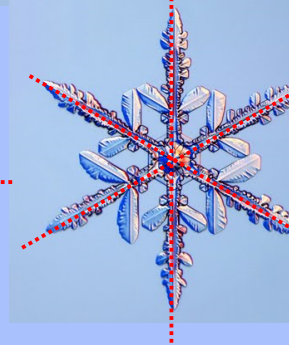
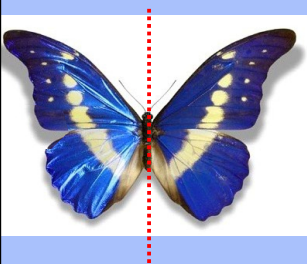


REFLECTIONS AND LINE SYMMETRY



Apr 12-3:57 PM

A figure has **symmetry** when it can be folded so two halves match, or are identical.

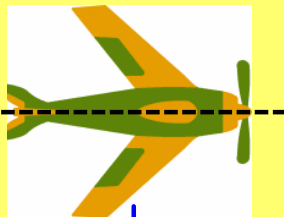


Apr 12-4:04 PM

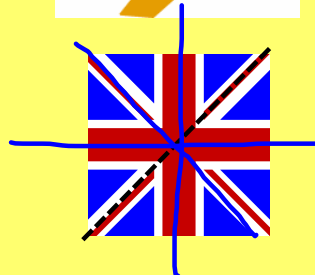
Shapes may show symmetry when folded:



vertically



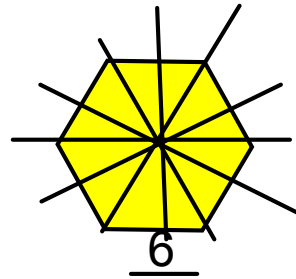
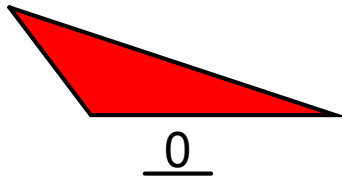
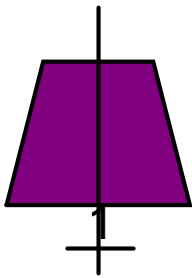
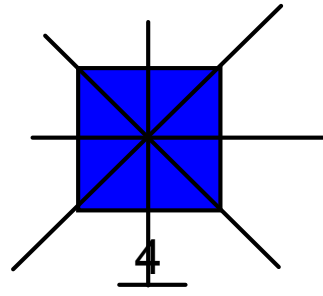
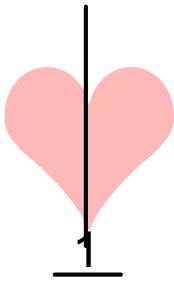
horizontally



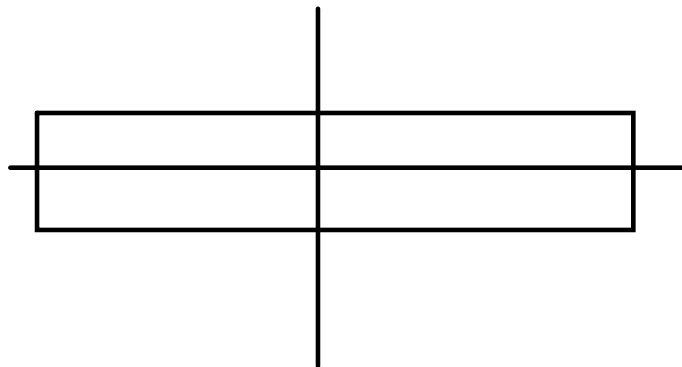
diagonally

Apr 12-4:13 PM

How many lines of symmetry are in the following figures?



Apr 12-4:26 PM



Apr 25-9:02 AM

Symmetry

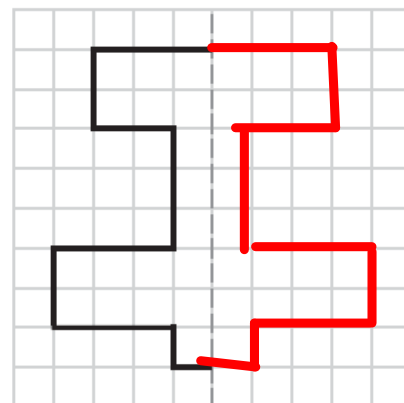
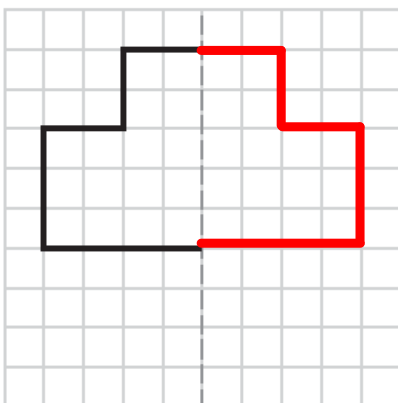
Color the shapes that are symmetric.

Apr 30-9:51 AM

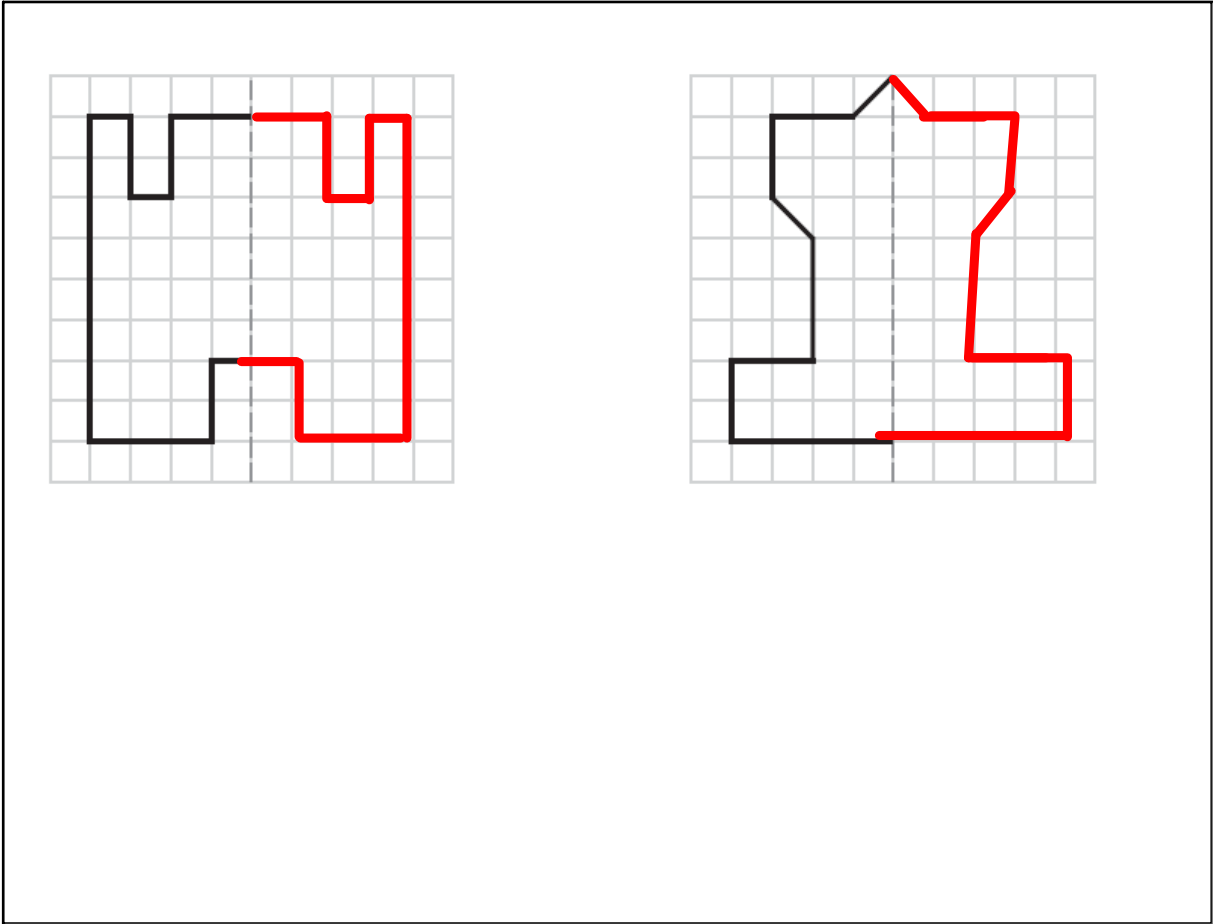
Creating Symmetry

Name: _____ Class: _____

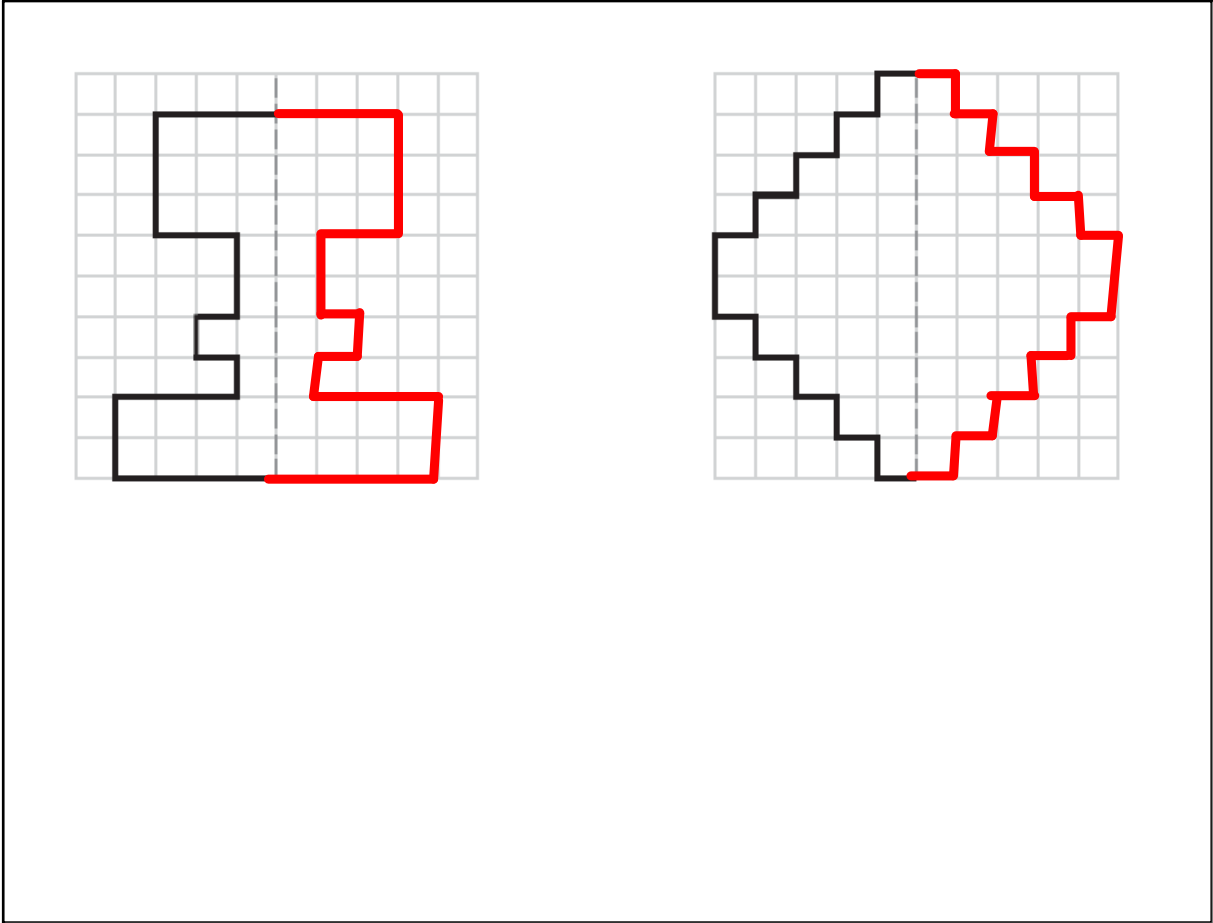
Each figure is half of a symmetric shape. Complete each figure by using the dotted line as the line of symmetry.



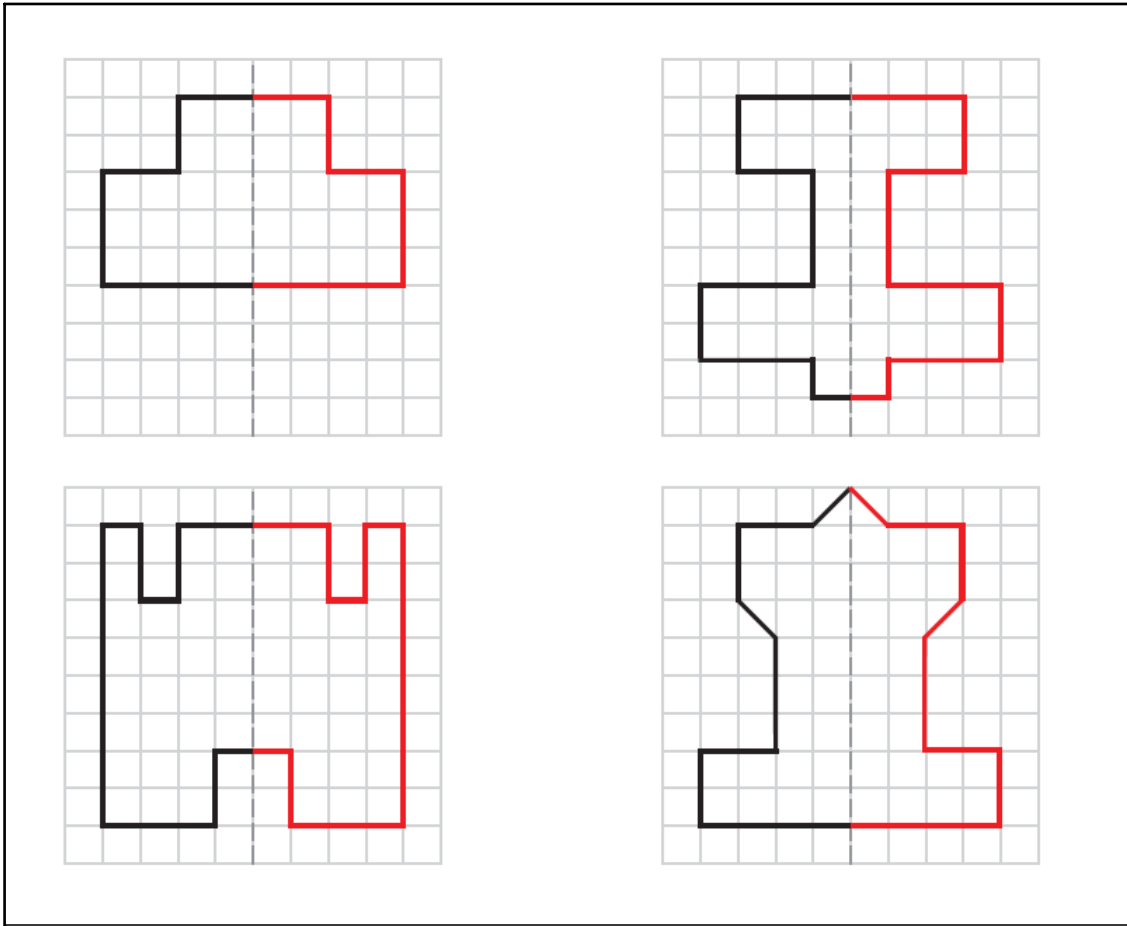
Apr 30-9:59 AM



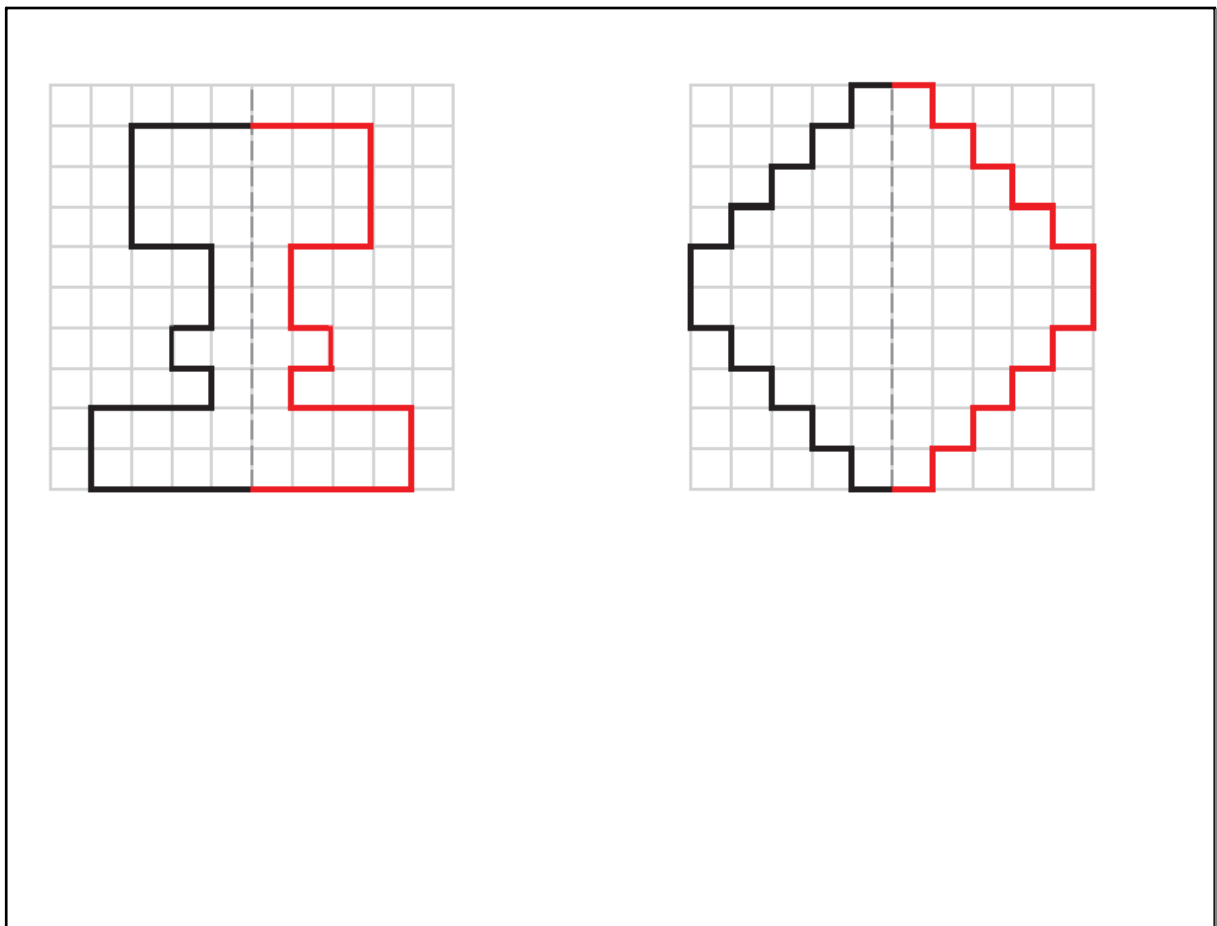
Apr 30-9:59 AM



Apr 30-9:59 AM

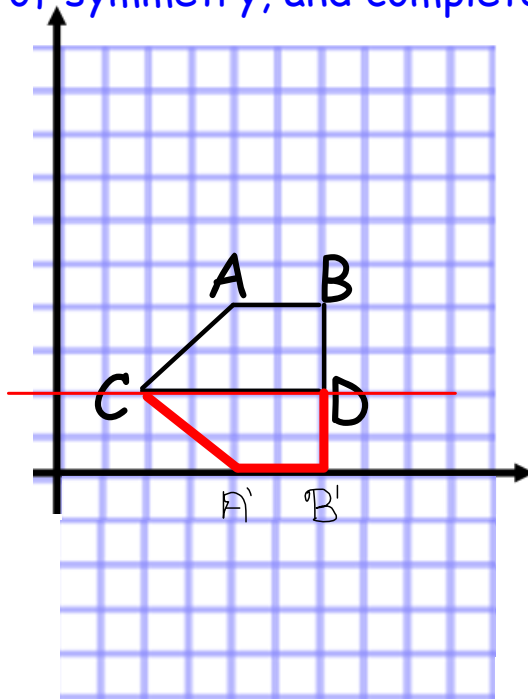


Apr 30-10:00 AM



Apr 30-10:00 AM

Copy the shape on graph paper. Use the red line as a line of symmetry, and complete the other half.



Coordinates:

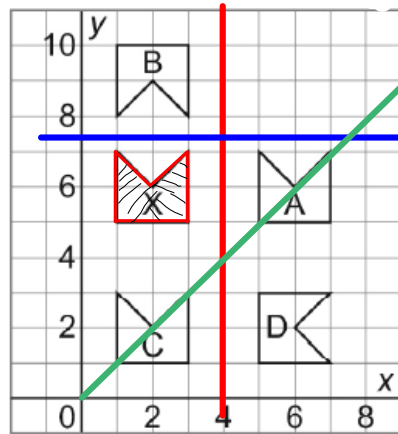
- A (4, 4)
- B (6, 4)
- C (2, 2)
- D (6, 2)

reflection

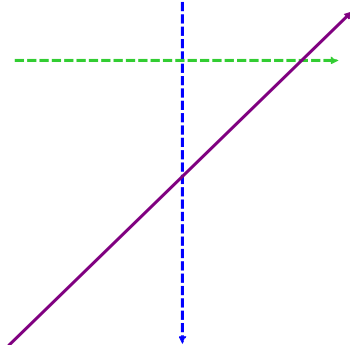
- A' (4, 0)
- B' (6, 0)
- C' (2, 2)
- D' (6, 2)

Apr 13-9:11 AM

Identify the shapes that are related to the shape X by a line of reflection. Describe the symmetry in each case.



- reflection through $x = 4$
 - A:** reflected in vertical line passing through 4 on the x-axis
 - B:** reflected in horizontal line pass through 7.5 on the y-axis
 - C:** not related to X by line symmetry
 - D:** reflected in oblique line passing through (0, 0) and (4, 8)
- Oblique just means a slanted line



Apr 14-7:50 AM

Quadrilateral PQRS is part of a larger shape.

a) Draw a reflection in the vertical line through 4 on the x-axis.

b) Write the coordinates of the original shape

$P(1,5)$ $R(4,2)$
 $Q(4,4)$ $S(1,2)$

Go to next page to see answers

c) Write the coordinates of the reflected shape

$P'(7,5)$ $R'(4,2)$
 $Q'(4,4)$ $S'(7,2)$

Apr 13-9:50 AM

Quadrilateral PQRS is part of a larger shape.

a) Draw a reflection in the vertical line through 4 on the x-axis.

b) Write the coordinates of the original shape

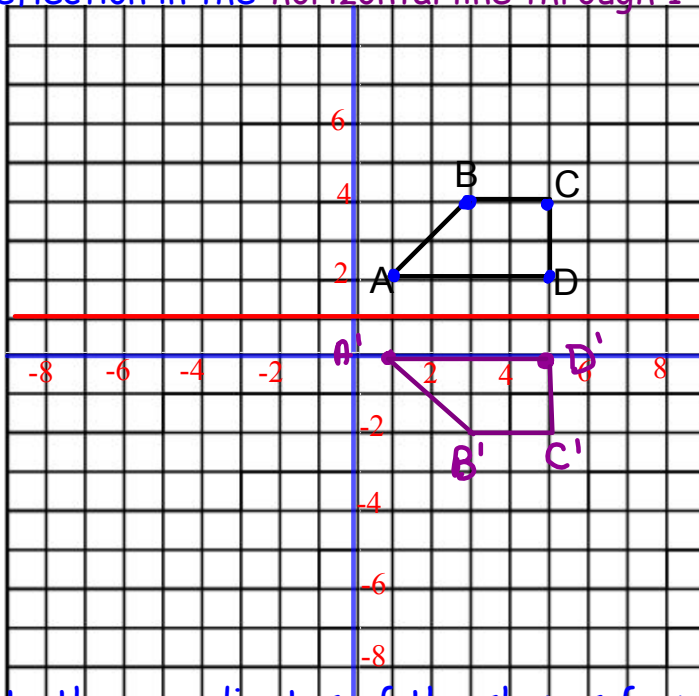
$P(1,5)$ $Q(4,4)$ $S(1,2)$

c) Write the coordinates of the reflected shape

$P'(7,5)$ $S'(7,2)$

Apr 14-10:16 AM

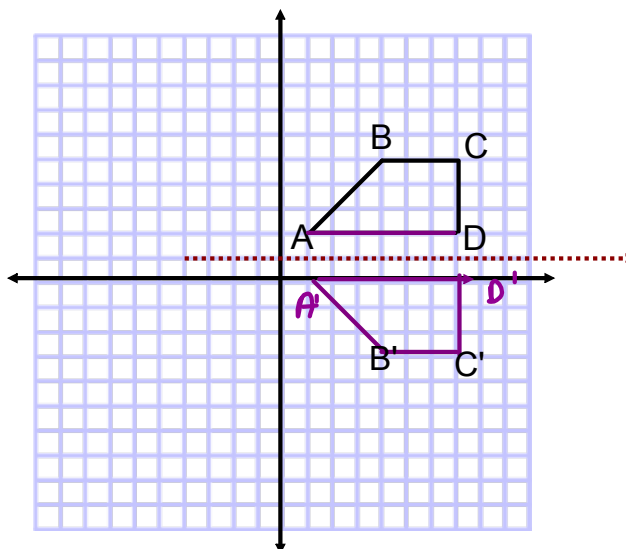
Draw a reflection in the horizontal line through 1 on the y-axis.



- b) Write the coordinates of the shapes formed.
- c) Describe the new shape and its symmetry.

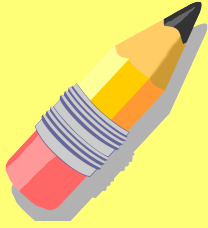
Apr 14-10:12 AM

Draw a reflection in the horizontal line through 1 on the y-axis.



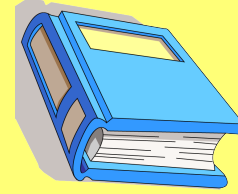
- b) Write the coordinates of the shape formed.
 $A(1, 2)$ $B(4, 5)$ $C(7, 5)$
 $A'(1, 0)$ $B'(4, -3)$ $C'(7, -3)$
- c) Describe the new shape and its symmetry.

Apr 14-10:25 AM



Homework:

p. 357 - 359



Questions: 3, 5, 8, 9, 10

Apr 15-8:10 AM