

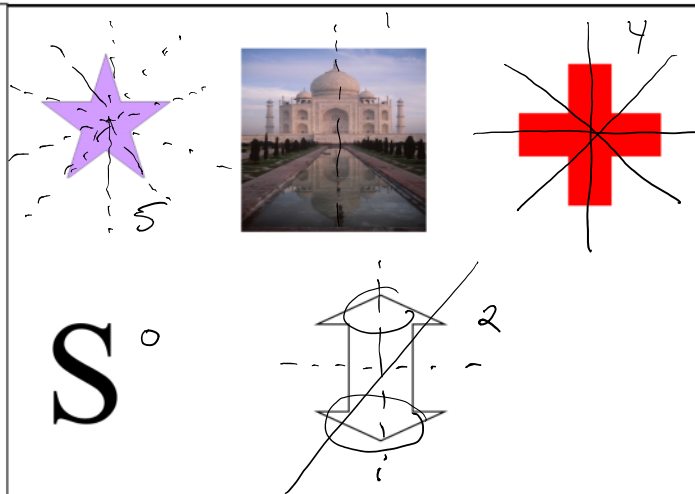
### 7.5 – Reflections and Line Symmetry

Focus: Draw and classify shapes with line symmetry

Main Ideas:

#### Warmup:

Draw any lines of symmetry for the following shapes. How many does each have?



S<sup>0</sup>

What is another name for a line of symmetry?

line of reflection or mirror line

Ex1

Go to p.355 in the text and see if you can answer example 2 without looking at the solution.

- A is related by a vertical line of symmetry at  $x=5$
- B is related by a horizontal line of symmetry at  $y=3$
- D is related by a diagonal line of symmetry

Ex2

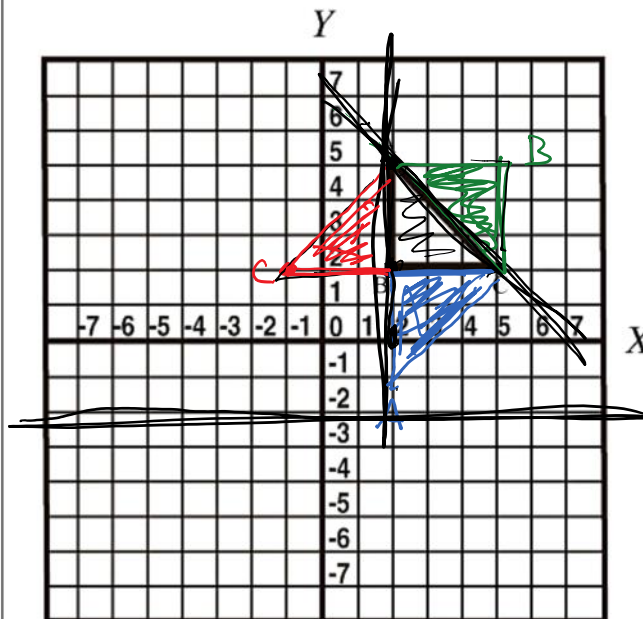


Ex2

Draw the reflection image of  $\triangle ABC$  through the following reflection lines:

- vertical line through 2 on the  $x$ -axis
- horizontal line through 2 on the  $y$ -axis
- oblique line AC

Fill out the tables below



i)

Point	Image
A(2,5)	A'(2,5)
B(2,2)	B'(2,2)
C(5,2)	C'(-1,2)

ii)

Point	Image
A(2,5)	A'(2,-1)
B(2,2)	B'(2,2)
C(5,2)	C'(5,2)

iii)

Point	Image
A(2,5)	A'(2,5)
B(2,2)	B'(5,5)
C(5,2)	C'(5,2)

**Reflection:** How do you identify whether a shape has a line of symmetry?